

# **/Re-Thinking the transition**

*The Architectural project*





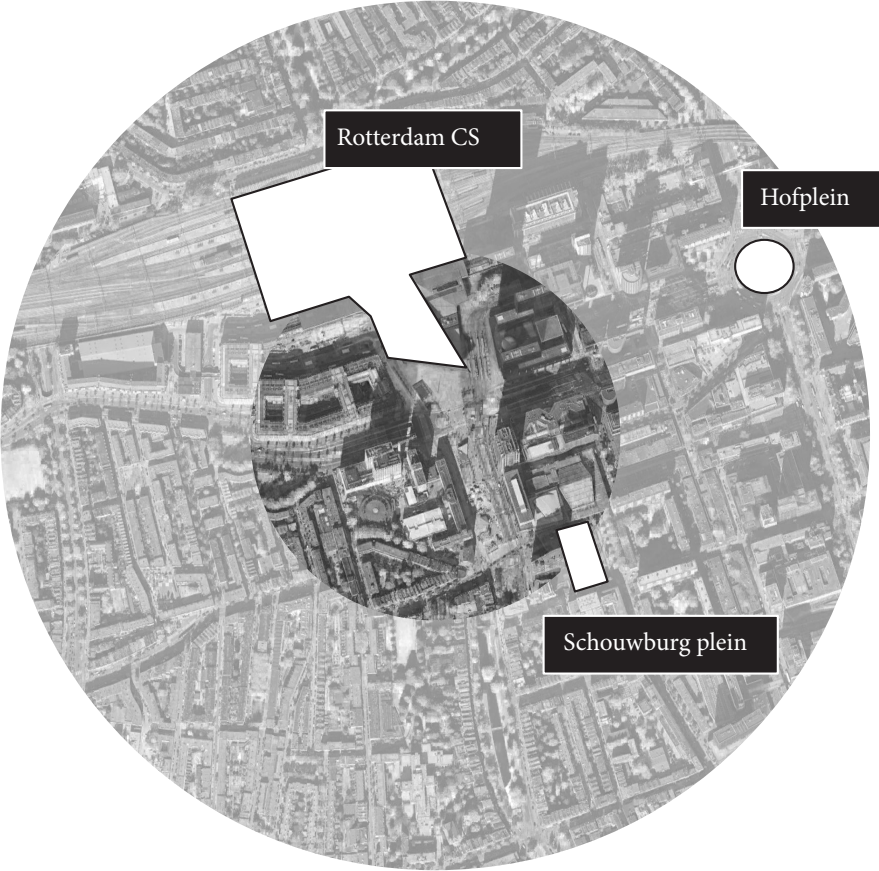
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Research mentor Martijn Stellingwerf



Contextual analysis  
*Kruisplein area Rotterdam*



Rotterdam Central Area  
*1:10.000*

## Case of Kruisplein

*A small research on the current formalised system/context*

Kruisplein Area in Rotterdam is a case study and design approach, to research the possibilities of creating a more porous environment, by enriching the transition space.

This location is chosen because of its variety of movements and lack of interaction. Different flows of traffic and people are intersecting and using the same area. As well the area has lots of potential to grow within the city as a place to interact, stay and learn.

Around 2011 this area changed because of its new central station and different new developments into a hybrid area with offices, livings, restaurants and shops. Except of the inner area “Kruisplein”. Designed as a place to gather and to have a break. But worked out as a formalised space in the city, which is mainly in use for transition towards the station or into the city. The use of form and mostly private functions are having close characters. This context research substantiated the choice and show the current absence and potentials.

An area which is highly accessible for all different kinds of transports compared to the rest of the city. The central station welcomes everyday 112.000 users, 80% of them access by the front entrance, facing the area of interventions. On of the three nodes in the Netherlands which has international connections. The area between the station and the city, has 11.838 m<sup>2</sup> of un-used public space, or place with more potential.

- ||||| Area of intervention
- ..... Neighborhood boundaries
- Public transport
- Publicly accessible
- ||||| Pedestrian movement
- Dominant Bicycle lane

Central station:  
112.000 users per day,  
on average

11.838 m<sup>2</sup>  
un-used public  
space

Place of  
pedestrian transition

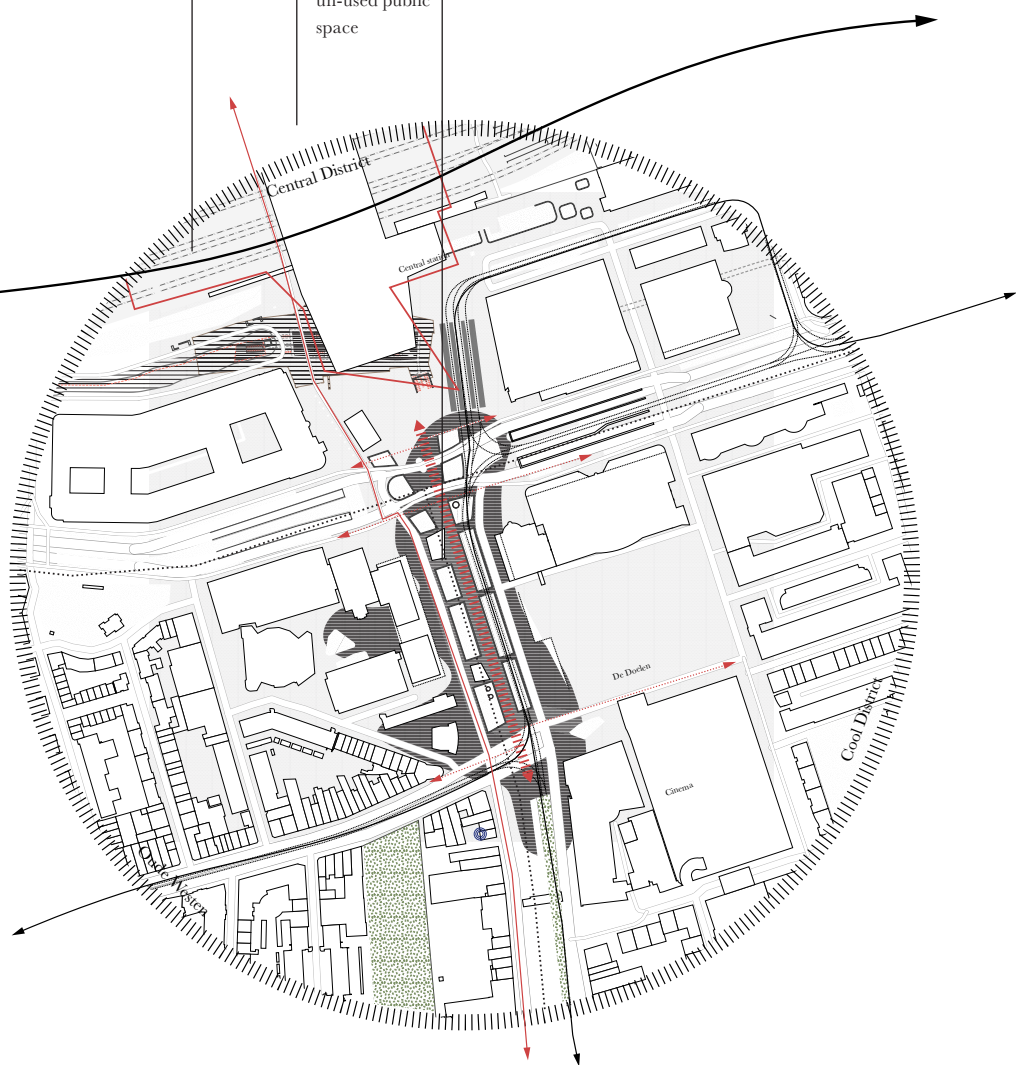
Central District

Central station

De Dooie

Gloria

Cool District

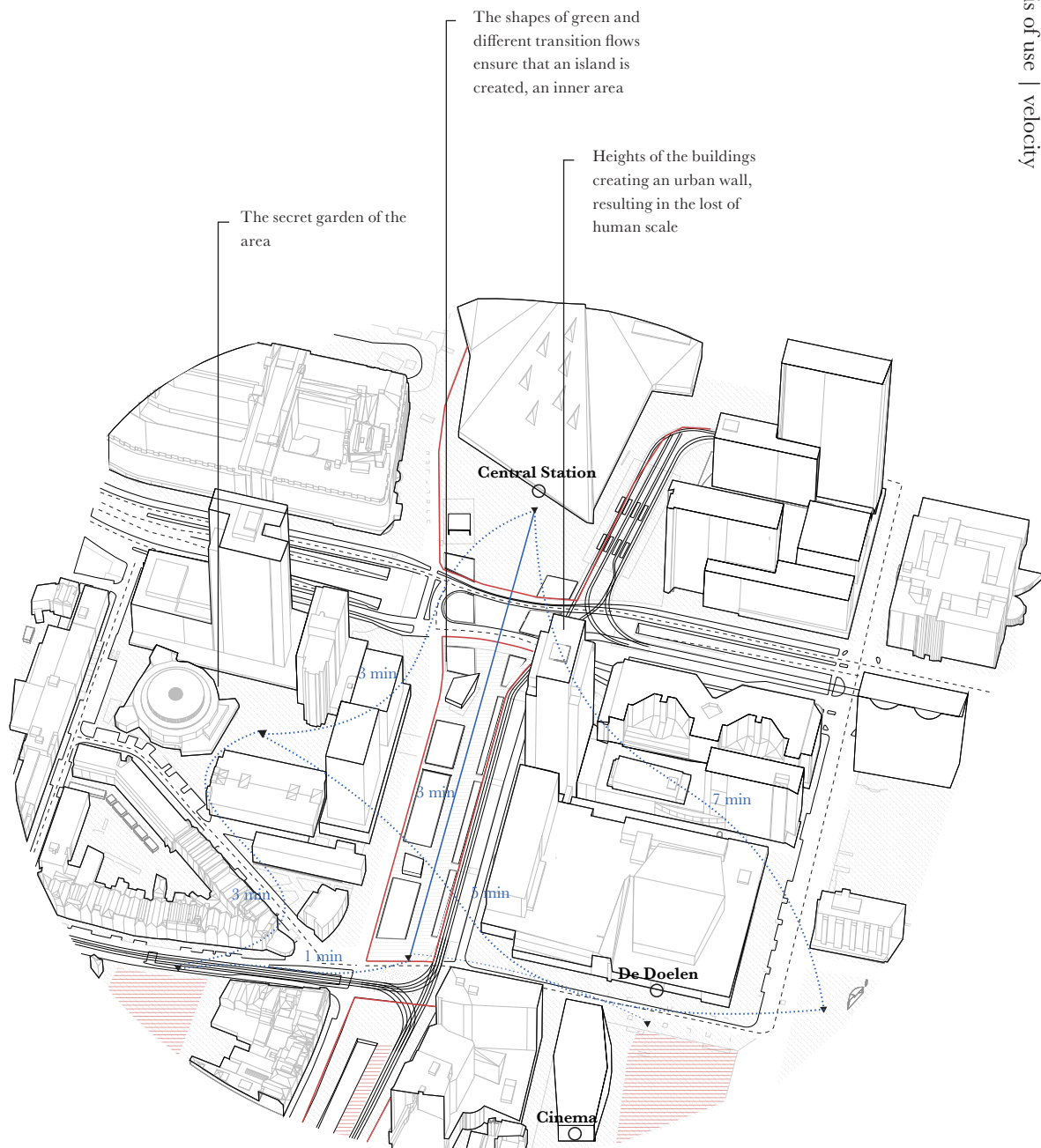


Besides the outer transition, the surrounded buildings having a semi-public area for inside movement and receiving guest and in some cases affording transition towards other hidden places. As well this analysis is showing the public access of the surrounded buildings.










The inner area of Kruisplein, surrounded by fast traffic lanes are creating a island in the middle, which suppose to function as a connector of the city. The formalised forms and paved surroundings are ensuring the transition and stimulating the movement of the users. The façades (buildings) of this island are having an average height of 57 meters, in combination with it's close appearance it is not including the human scale.



The surrounded buildings, which are facing the area are often private. These private functions are framing the intermediated area, without any thresholds. The different conditions in combination with the variety of users is creating a linear flow through the area

-  Private entrance/function  
(uninviting entrances)
-  Public entrance/function
-  Framed inner area
-  Thresholds in public space
-  Area of movement and flows

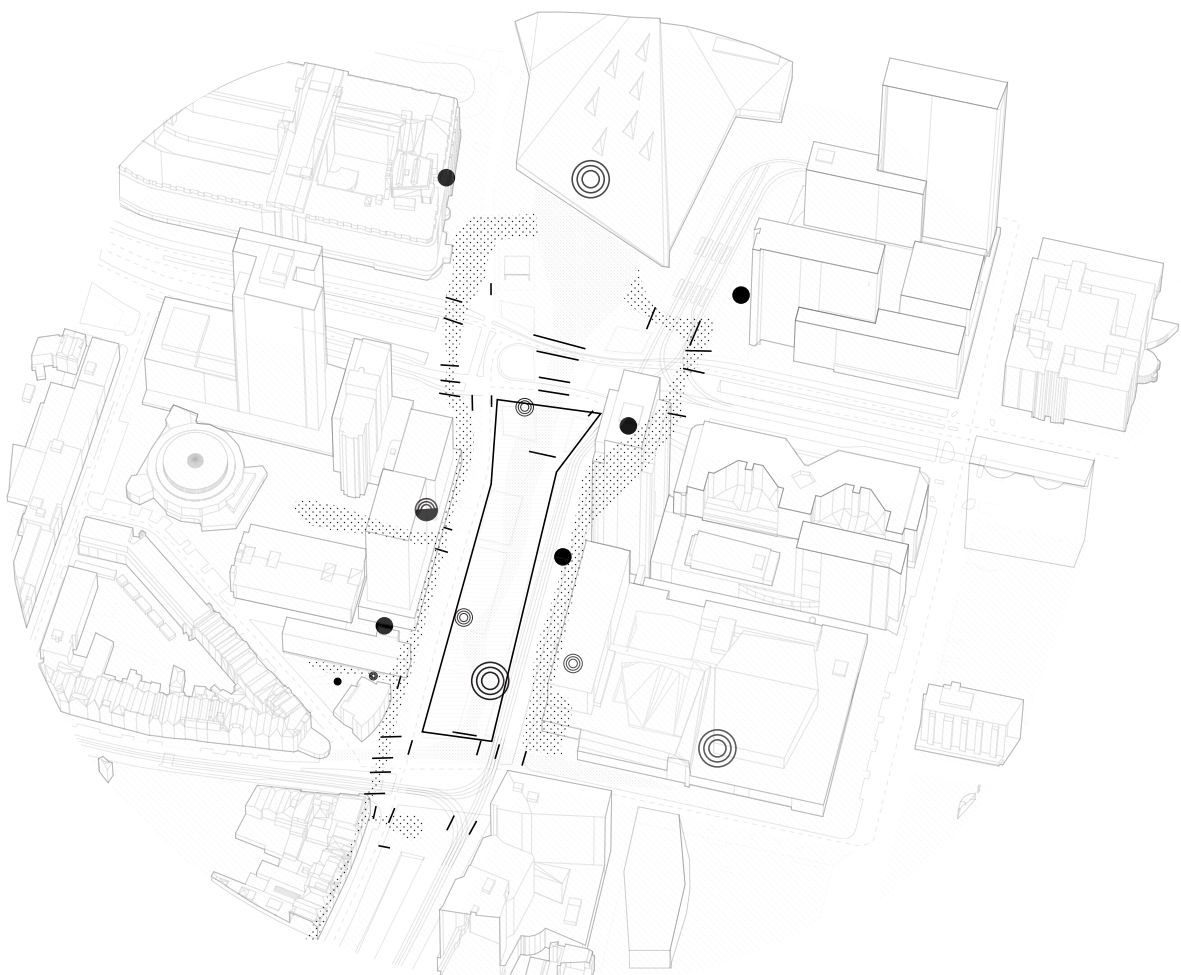




Image by Author  
Kruisplein, November 2019

“I believe that many aspects of the pathology of everyday architecture today can likewise be understood through an analysis of the epistemology of the senses, and a critique of the ocular bias of our culture at large, and of architecture in particular. The inhumanity of contemporary architecture and cities can be understood as the consequence of the neglect of the body and the senses, and an imbalance in our sensory system”

- Maurice Merleau-Ponty (1977)



Image by Author  
Kruisplein, November 2019





Image by Author  
Kruisplein, November 2019



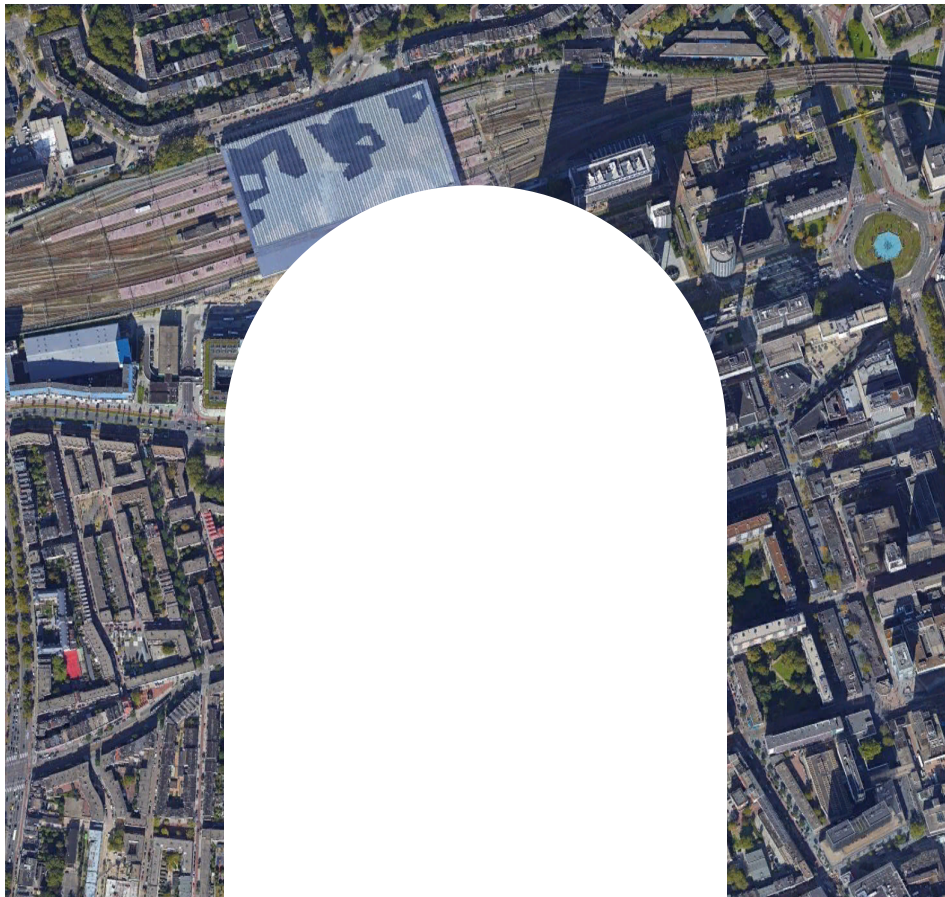


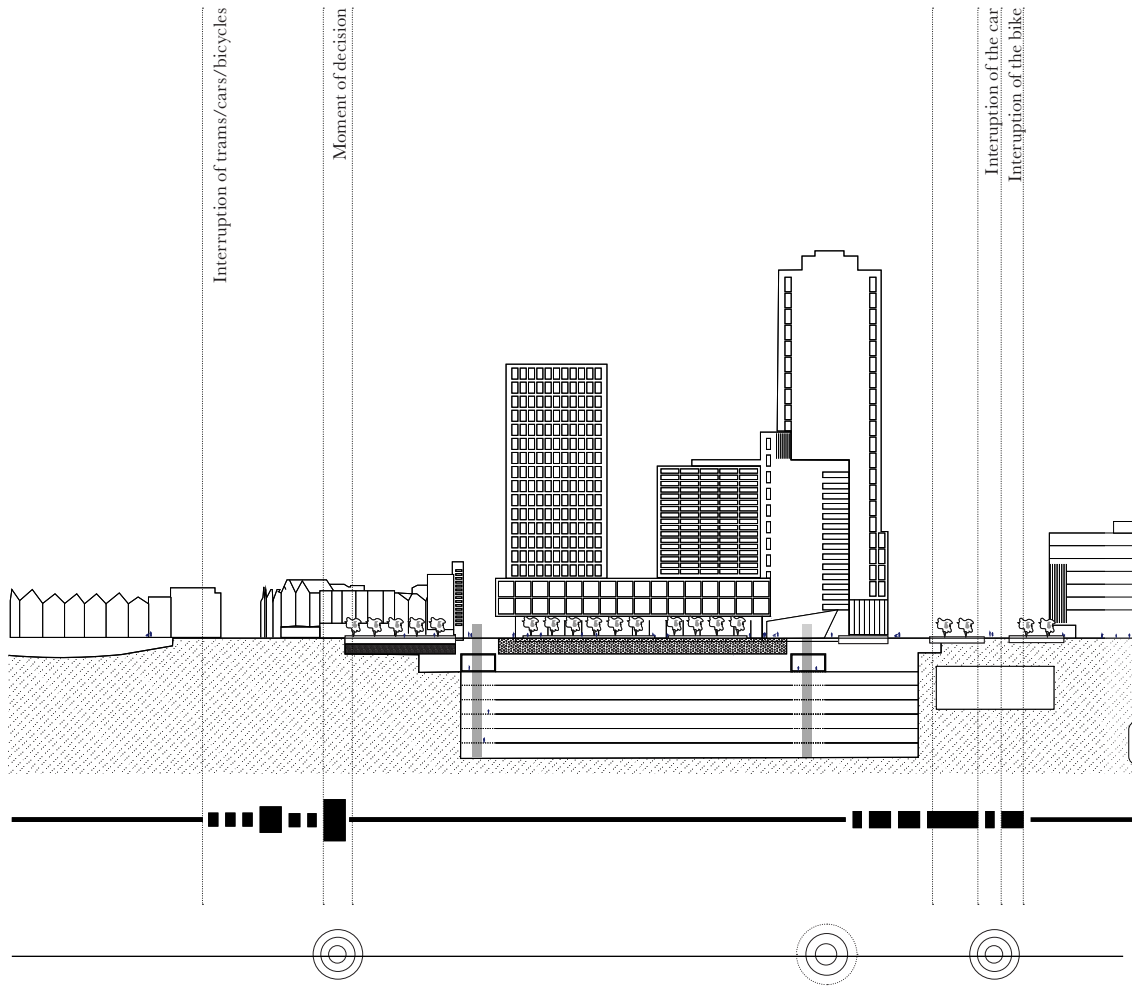
Image by Author  
Kruisplein, November 2019

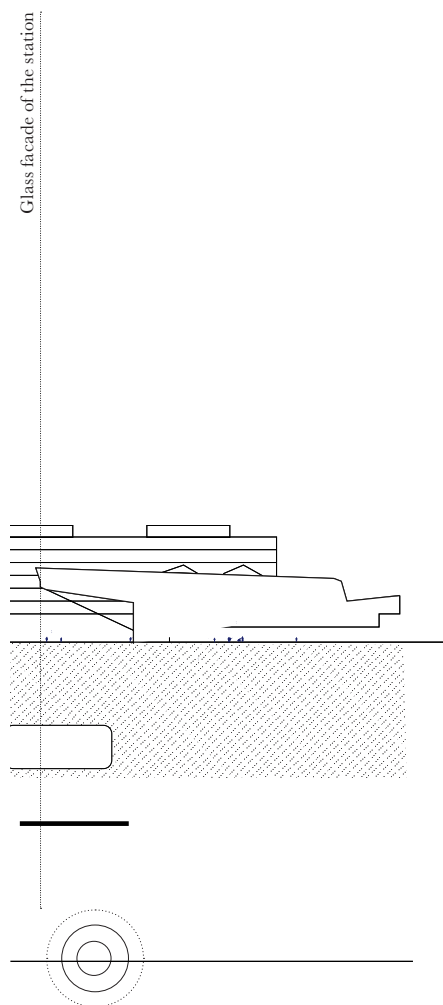
The sensible is simply the medium in which there can be  
being, without it having to be put there  
- Maurice Merleau-Ponty (1977)

The chosen area is located such central that it functions as a place of welcomes and farewells. The place is known for it's function as place of transition and assembly point, a place for having a quick lunch. From an more abstract view the area could be seen as a set of corridors, connecting the station with the city. By breaking through this formalised form, using the transition space and make it more porous, create different climates, create a place.

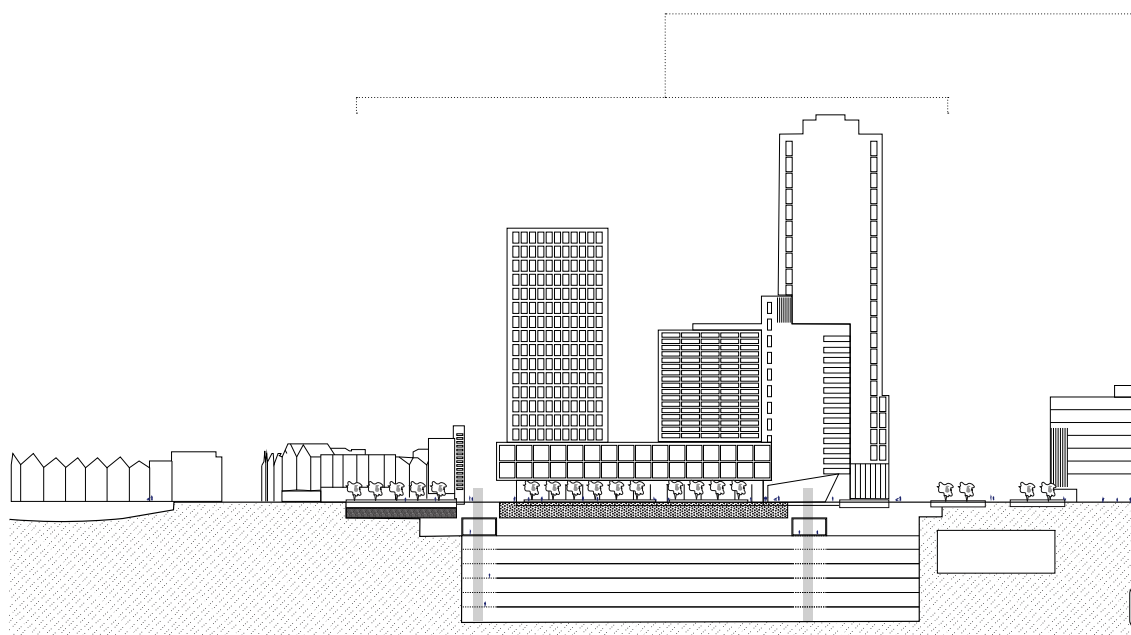
**Cultures & Climates differ all over  
the world, but people are the same.  
They'll gather in public if you give  
them a good place to do it  
- Jan Gehl**



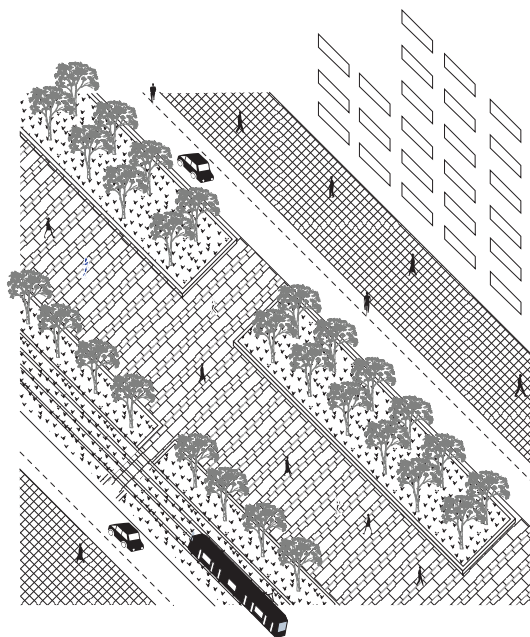




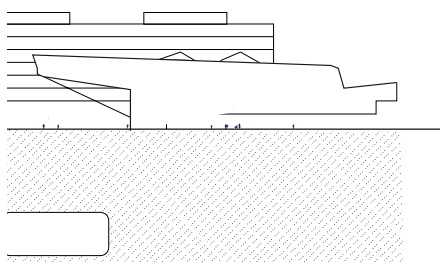
The inner area consist beside the functions visible from the area also of a parking garage, with a capacity of 760 parking places, which are accesible through two extravers pavilions. In-between this pavilions, is the corridor located which is reinforced by the seating elements of the area. The area consists of different thresholds, which are maily bumps of other traffic flows. As well the activity is maily close to the square in front of the station and more towards the city.

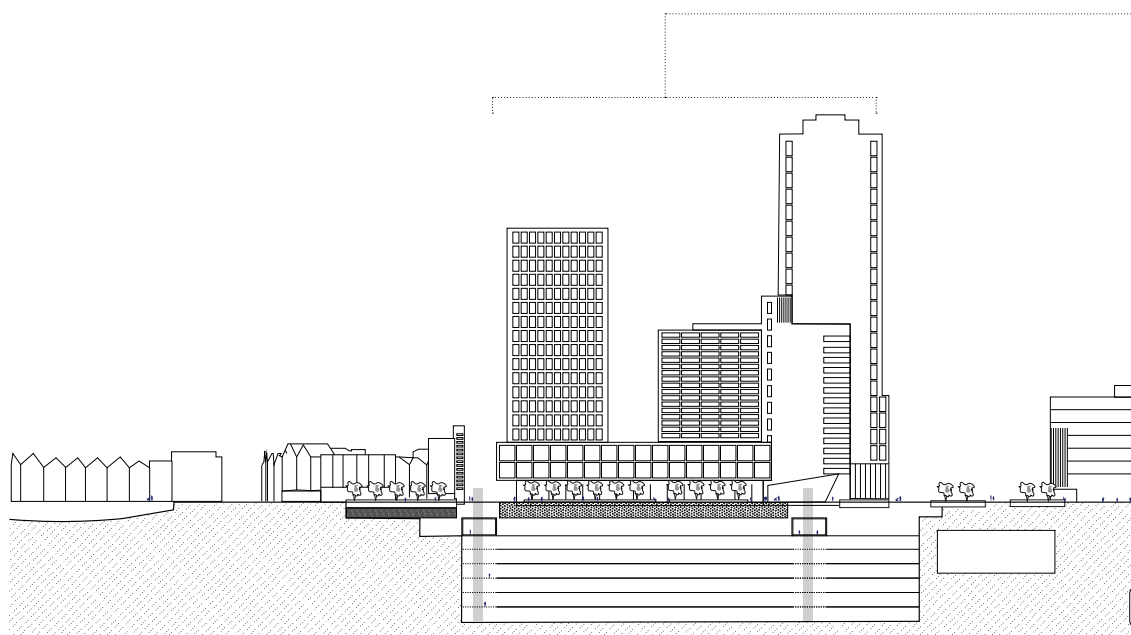


The urban applied forms, which are placed between the different places of movement are creating a semi closed off corridor, which doesn't allow the user to interact with the sided functions. As well the use of green is positioned aligned and radiating a monotone atmosphere.



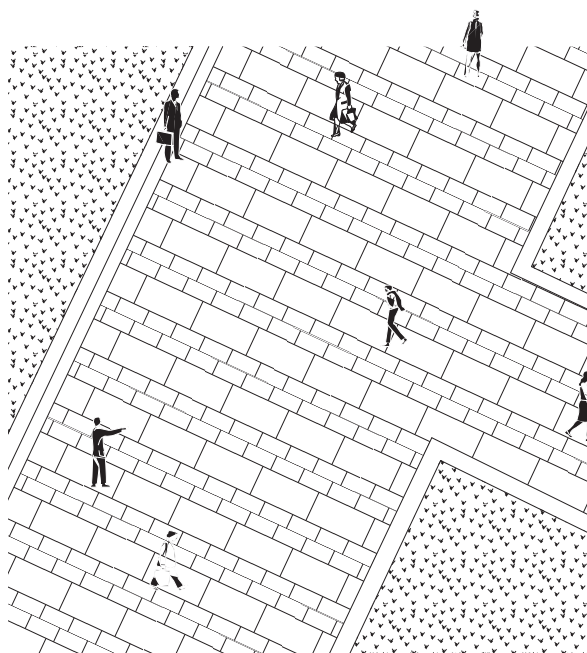
Different (closed-off) **corridors**  
of transition



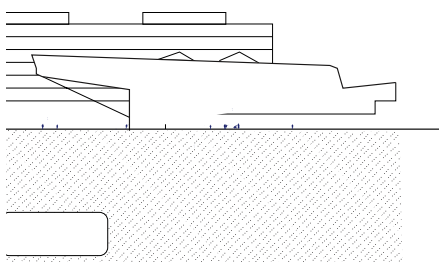


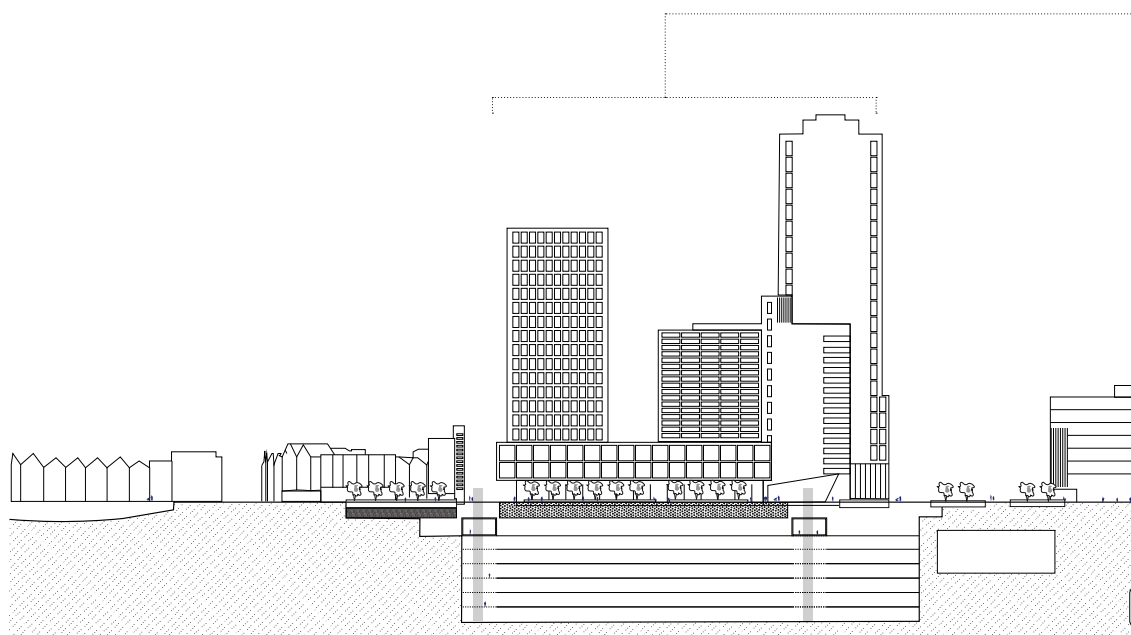
The generally paved area is interrupted by raised green surfaces, which suppose to activate the area and add greenery . The surfaces are interrupted with the use of concrete edges. Affording different activities, such as gathering and moments of rest



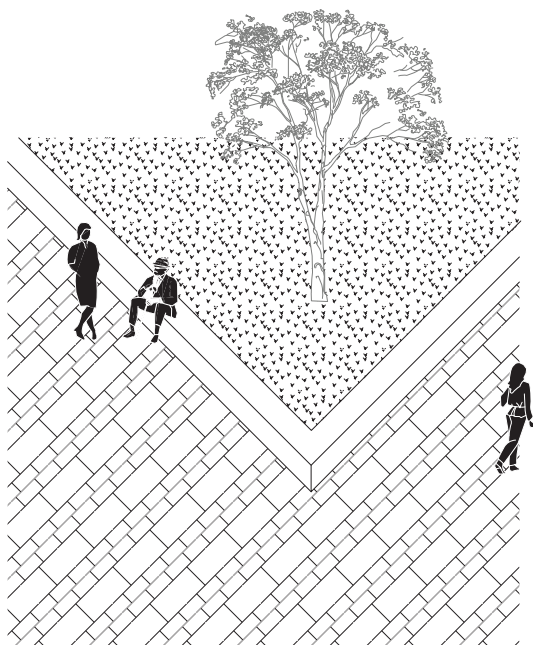


This space serves as a **transitional area**, rather than a interactive space

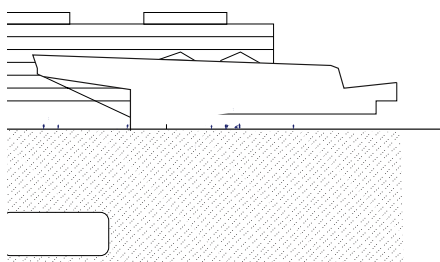




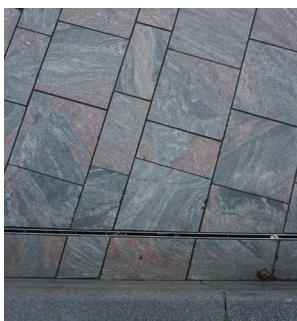
The existing boundaries of the area, made of dark grey stone affording the passenger for a sit. The dark colour of the edges, could with the condition of good weather heat and also with a little bit of sun creates a moment of comfort.



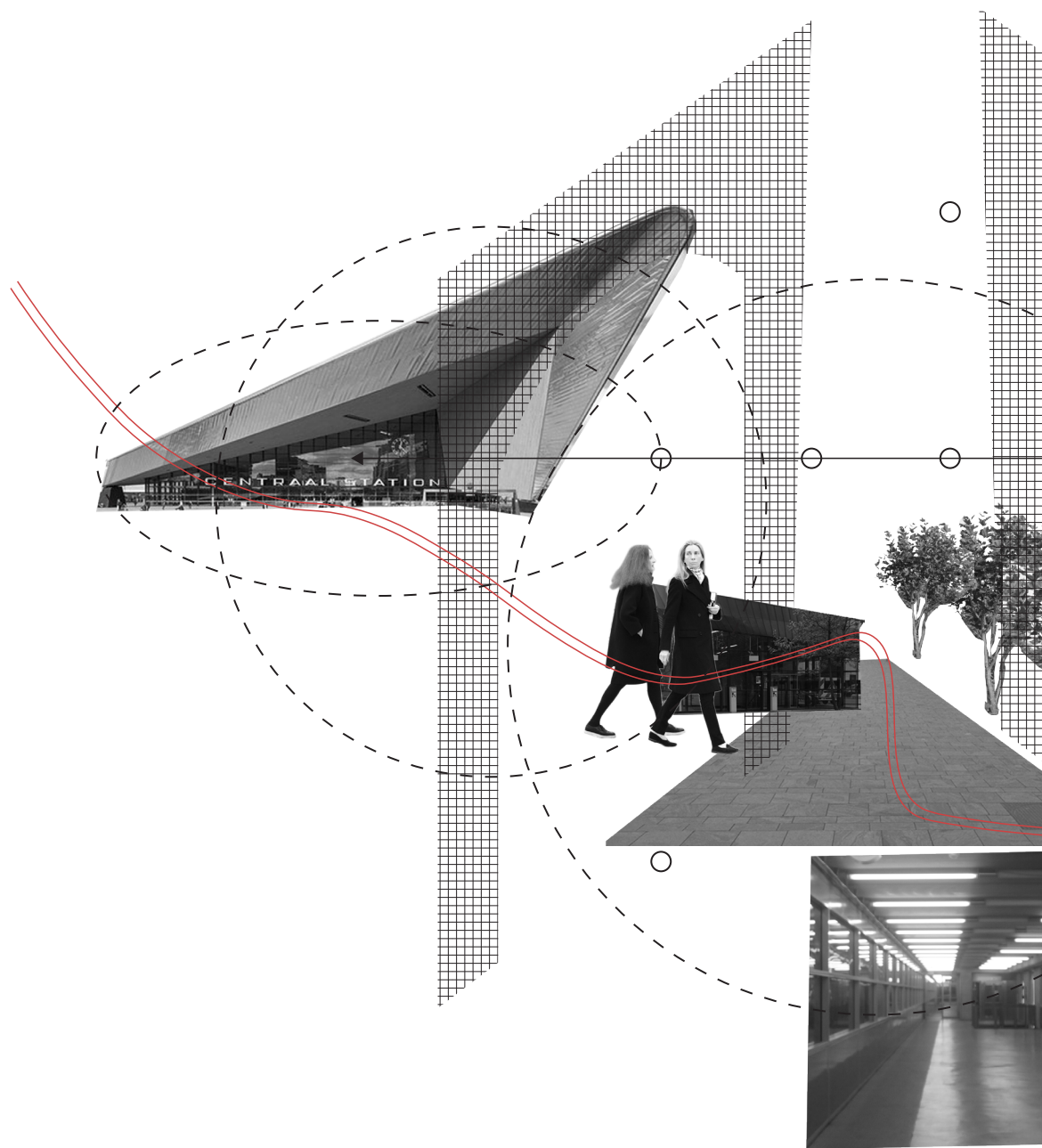
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The boundaries offer moments  
of **potential rest**

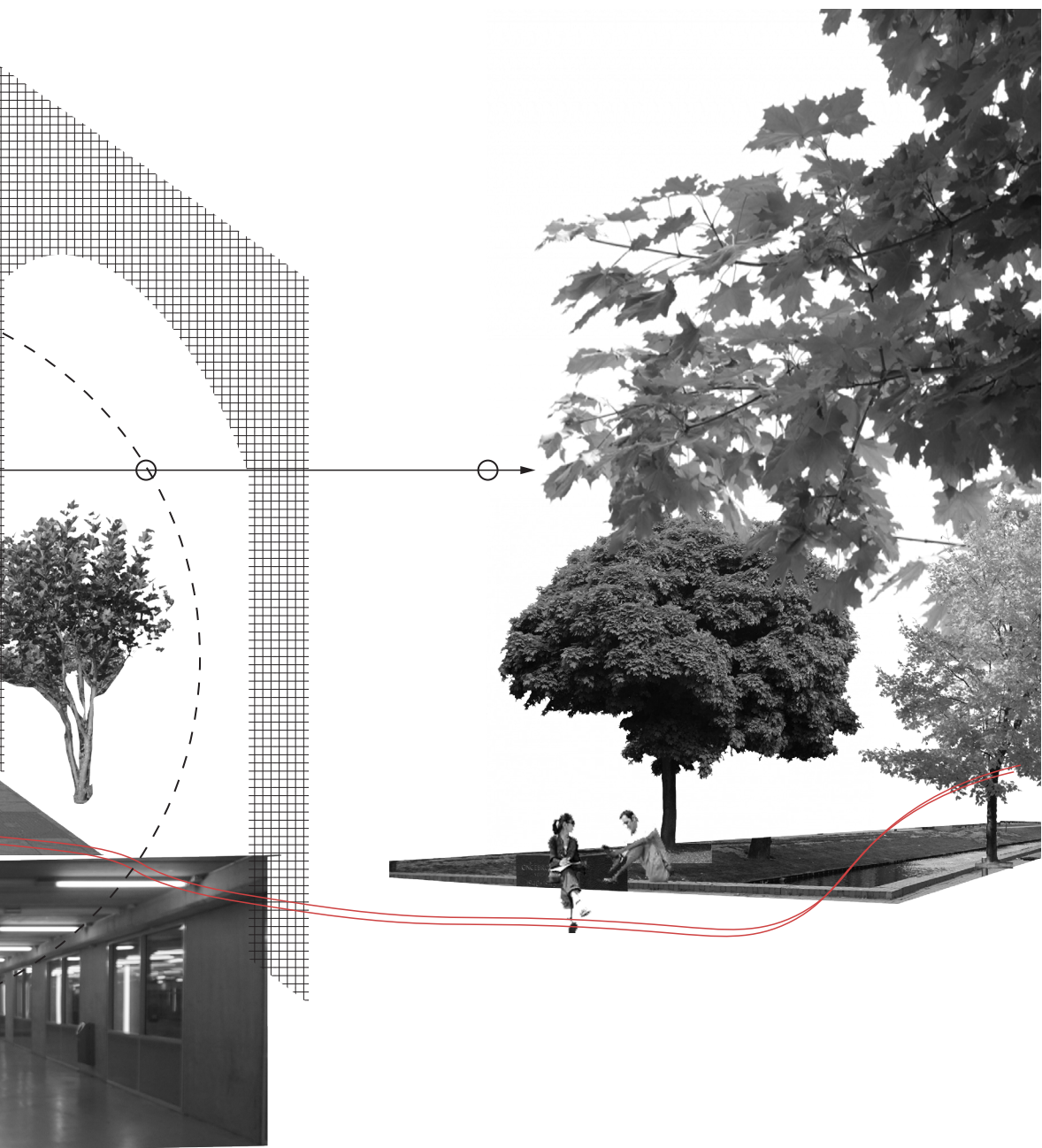






The area should be seen as a potential place for interaction, an intermediary meditative function. Affording different moments of potential rest by using the existing and new introduced thresholds





The current location system generally works well: it functions mainly as a space for transition but has the big potential to grow into a place of interaction and rest. The gained knowledge of the research allows me to create a strategy which will slowly transform the area into a place for discovery. A project which goes beyond simply making a “de-formalized” architecture, but using this thresholds as an extension of an experience.

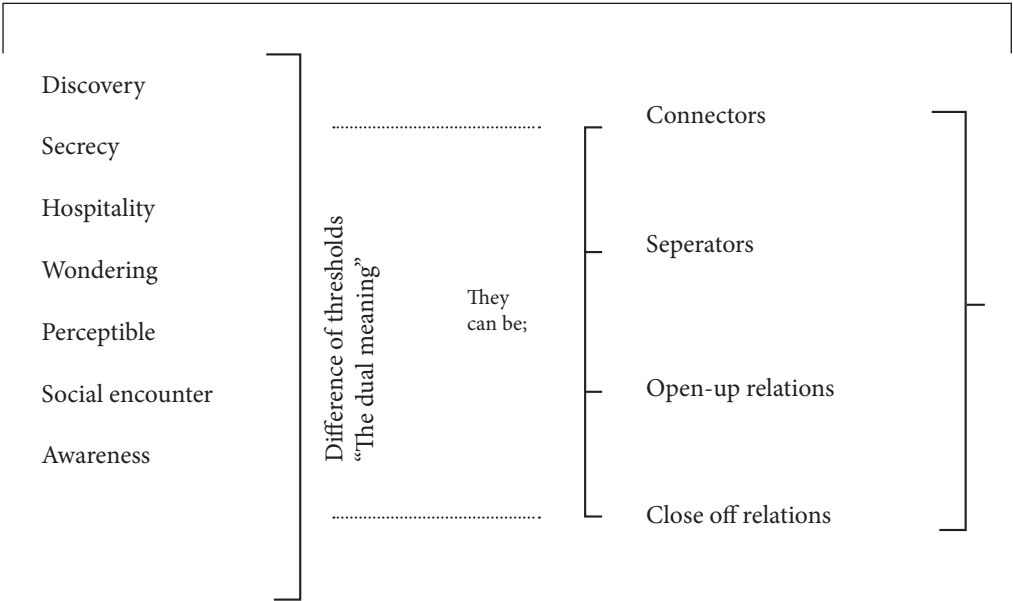
Architecture in cities nowadays are used to serve but offer the potential to be a tool to regulate and influence the behaviour and the “being” of the people. As said earlier in this research architecture is often used and related to certain events of repression, in this case the relation and transition of people. Specifically, in the urban spaces we try to define them to regulate the system, which doesn’t allow the open interpretation of spaces

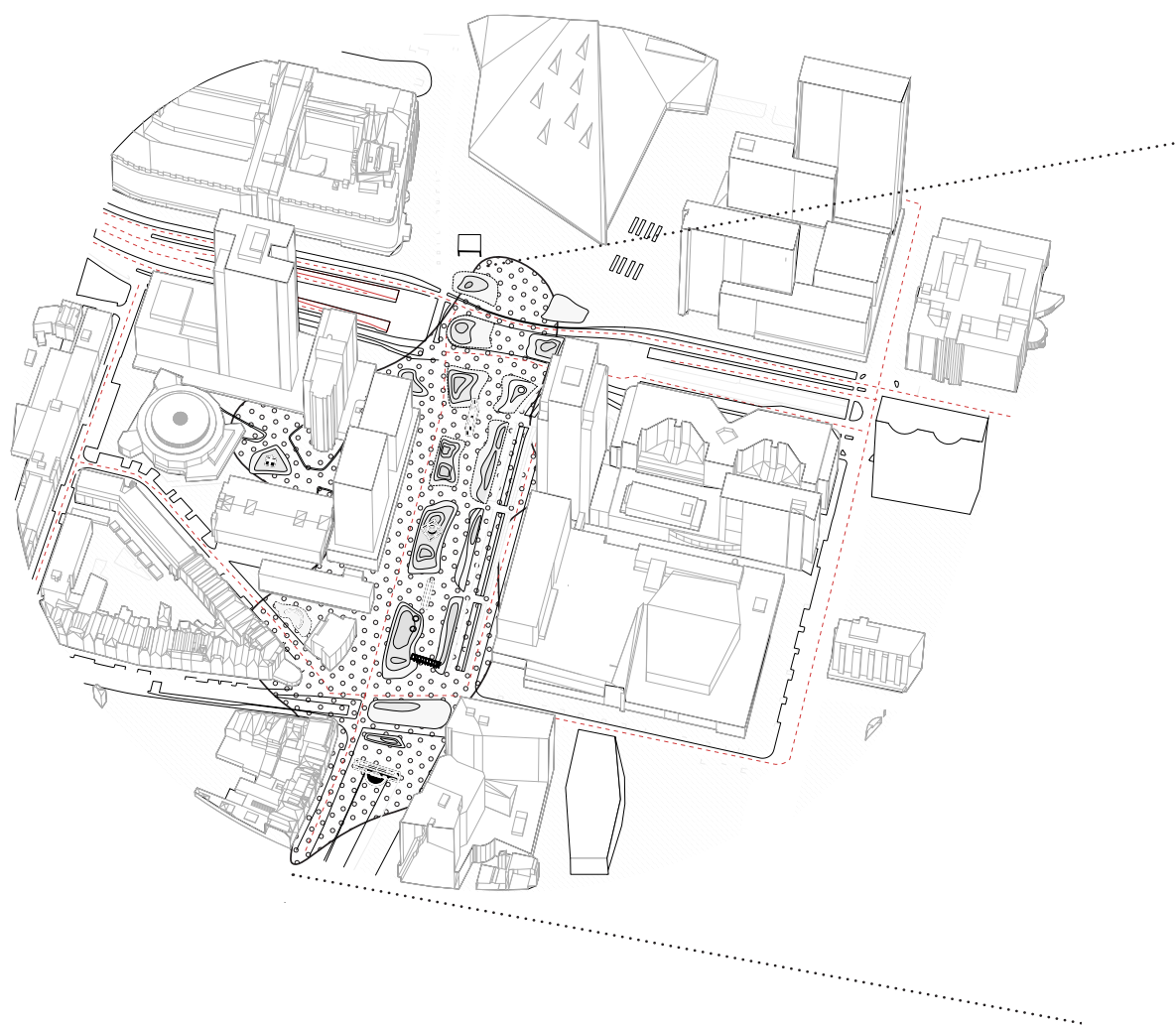
The potential of Kruisplein, lays in these moment of fast movement and especially the moments we pass by fast, the transition, and it’s thresholds. This areas of interventions allow me as architect to think about the relation of the place and the human and how it (possibly) interacts.

As I stated in the research that we became deaf of our surroundings, we became for the kruisplein as well. This project wil restitute the lost of room for imagination, awareness and experience. This may sound like a neutral position to take, but these definitions and possibilities are not neutral. The area will offer, by it’s simple forms moments for interactions and interpretations. Besides the different experience, also the project pays attention to the differences of properties, flexibility and ability of the body

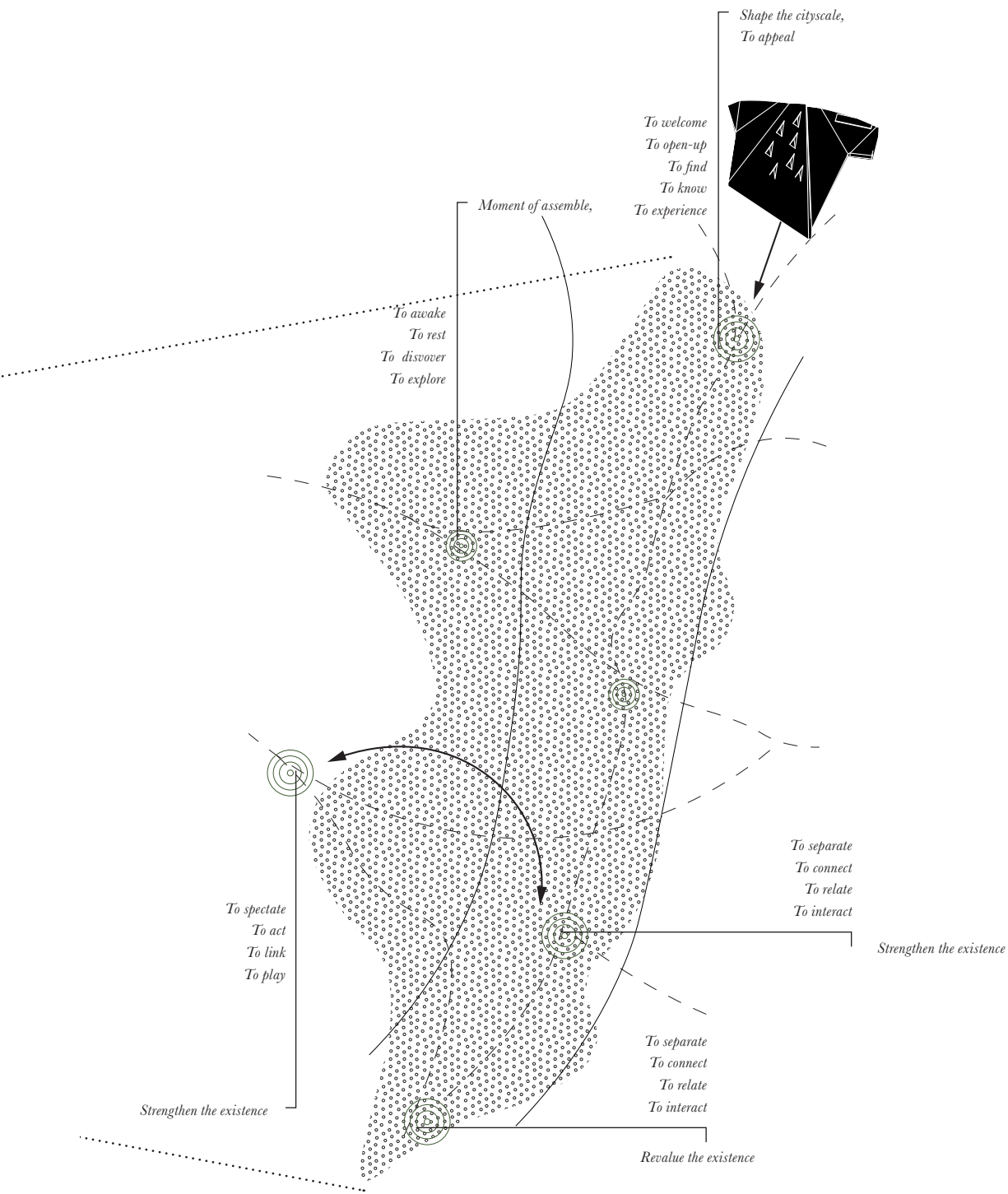


Penetrate in the New tapestry  
*the new thresholds*

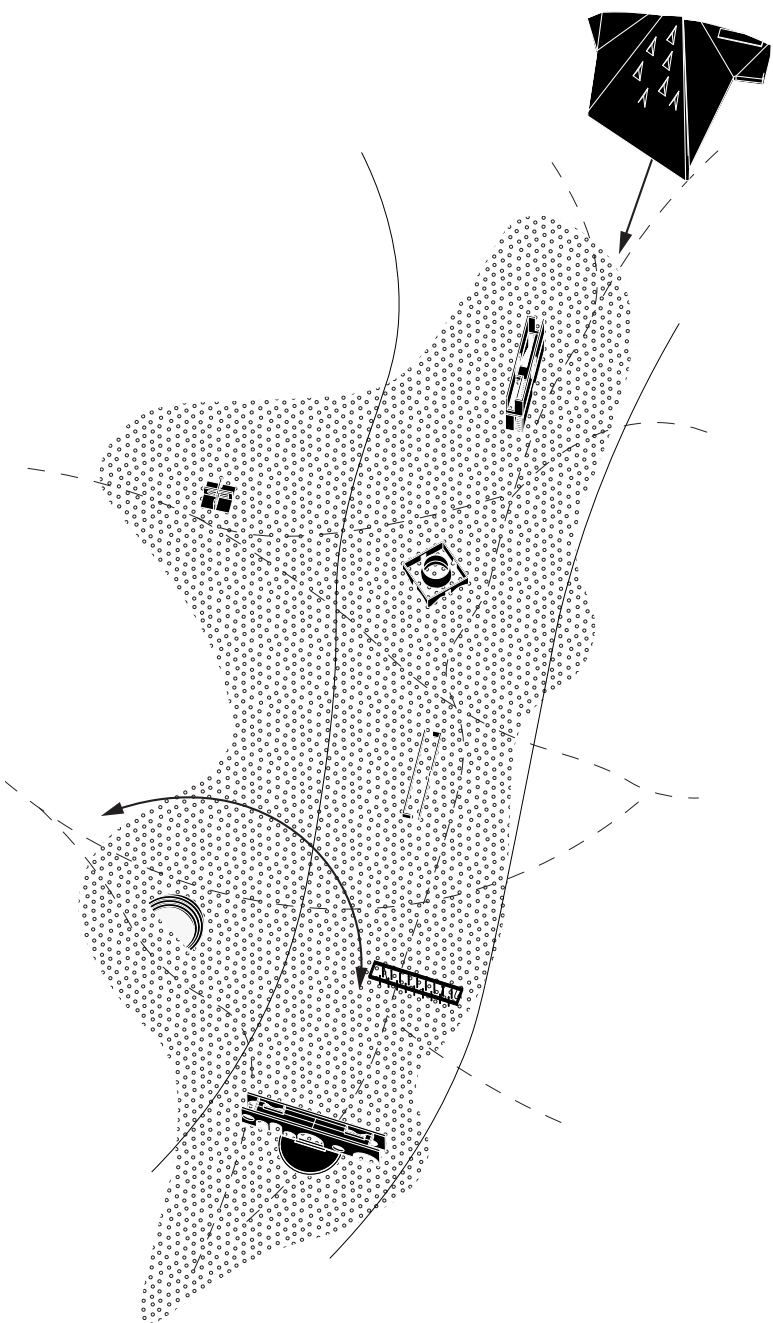




In the area there is a variety of use and moments of interaction. As well the surroundings are offering good moments to interrupt and potential to introduce a new thresholds, because of its size









The Architectural projects  
*the interventions*

THE TRANSITION SPACE RE-VISITED is a project which shows the potential of the transition space, by mediating between the individual “the body” and their surroundings, to be critical of architecture based on perception and behaviour. For this, a tapestry is introduced to undo the staticness and undulate the user. The project has the intention to create a more porous and paused environment by penetrating in the tapestry with architectural elements, all having different objectives, which smoothly arise curiosity and trigger the body to make new relations and experiment. The relation of the different scales in this project will contribute to the relation, experimentation and perception of the visitor, passenger and passer-by. – *An architectural project of consciousness, contingencies and perception*

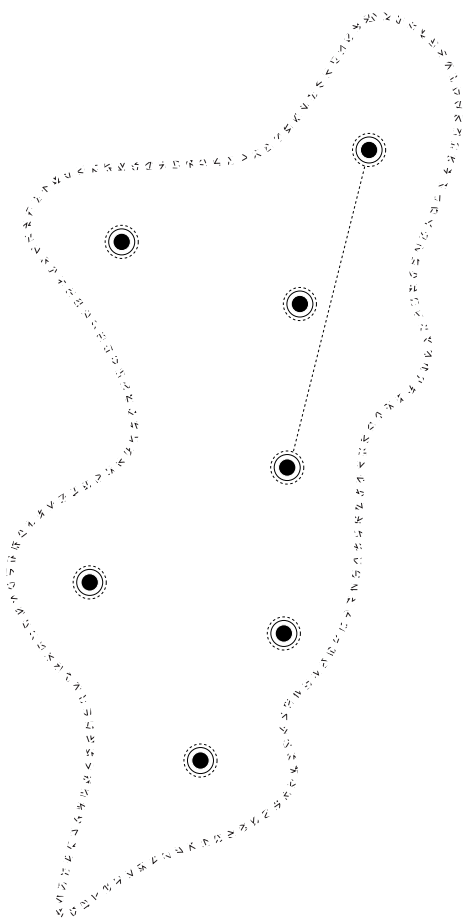


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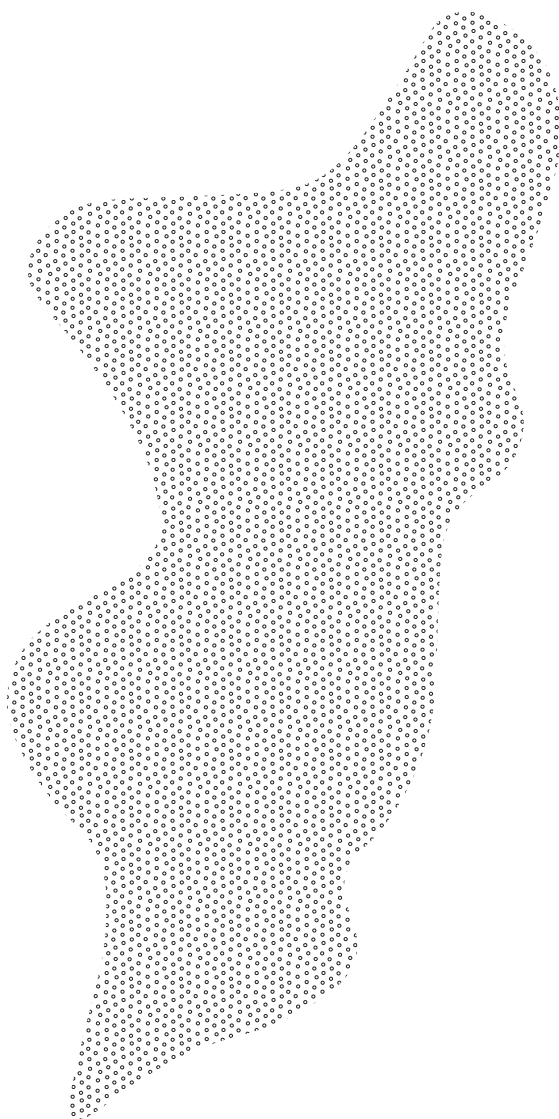


The Ground Undulation  
*adjusting the tapestry*

Punctuation  
*Introducing the objects*

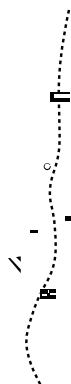
The existence  
*over time*

The Ground Undulation  
*adjusting the tapestry*





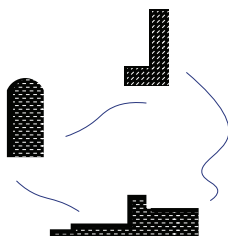




*Penetrate in the urban landscape and create  
small rooms/interiors of/for the city*



*A design project with a few  
dots at the end...*



*A project with interlinked story but  
physically connected with its attitude*

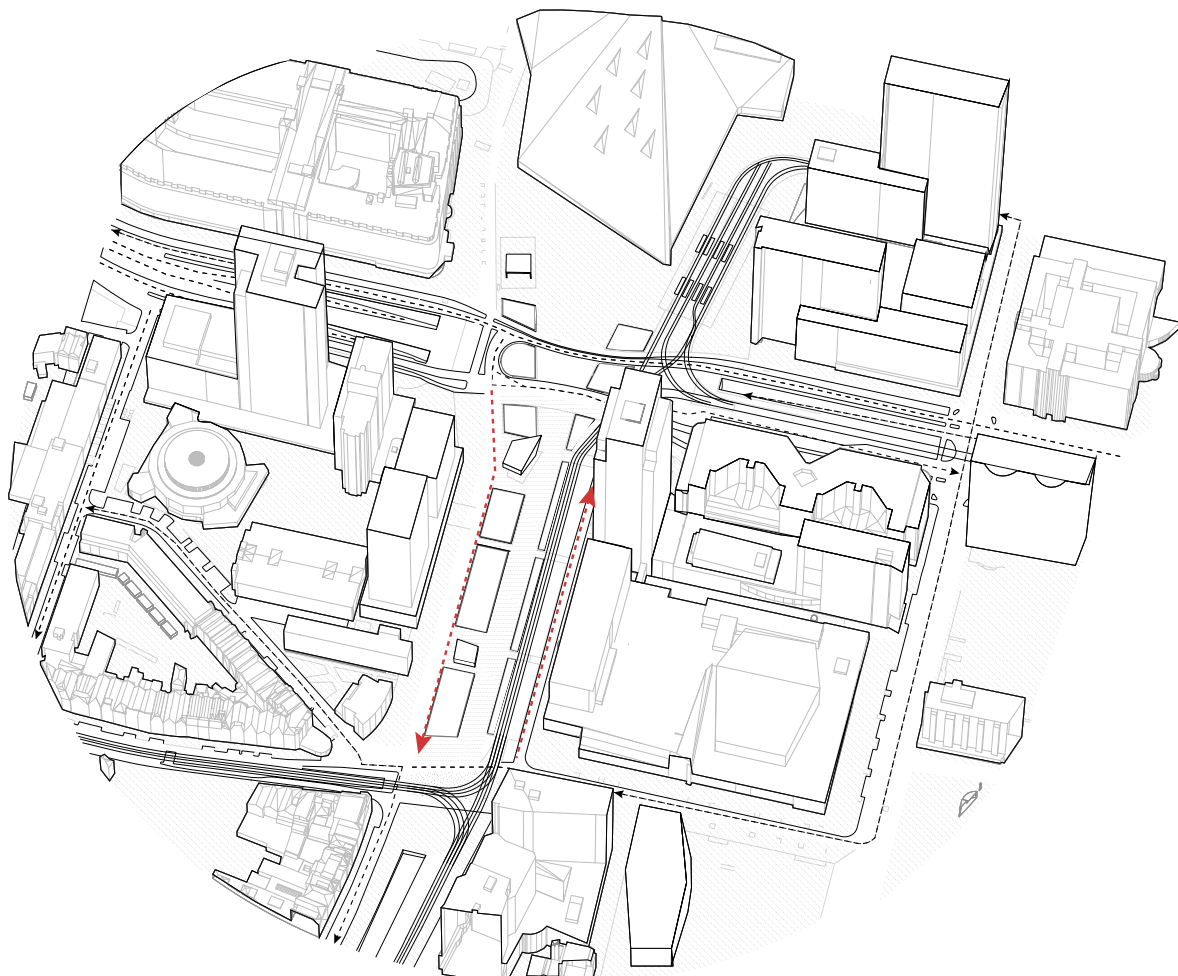
THE FLOOR AS POTENTIAL – The urban adjustments are seen as the first layer of intervention, which will firstly activate the area and create a place of stay and interaction. This all, by keeping in mind the current working system of transition and it's fast character. During this project I have devoted besides the architecture also attention towards how the different elements; the floor, roof, wall and corridor are perceived by the human and how we could possibly interact with them. Especially the floor in the urban environment could change the use and has the potential to be create this relations. With the research I conducted a observation method supported by drawing where I tried to understand the





Besides the affordance of movement, the floor can play an role of interaction by offering the users elements to interact with. Small difference in altitude already can afford the user to lay down, reinforced by the change. As well the material, the softness, and the environmental appearance can stimulate, such as; sunlight, shadows and use of materials.

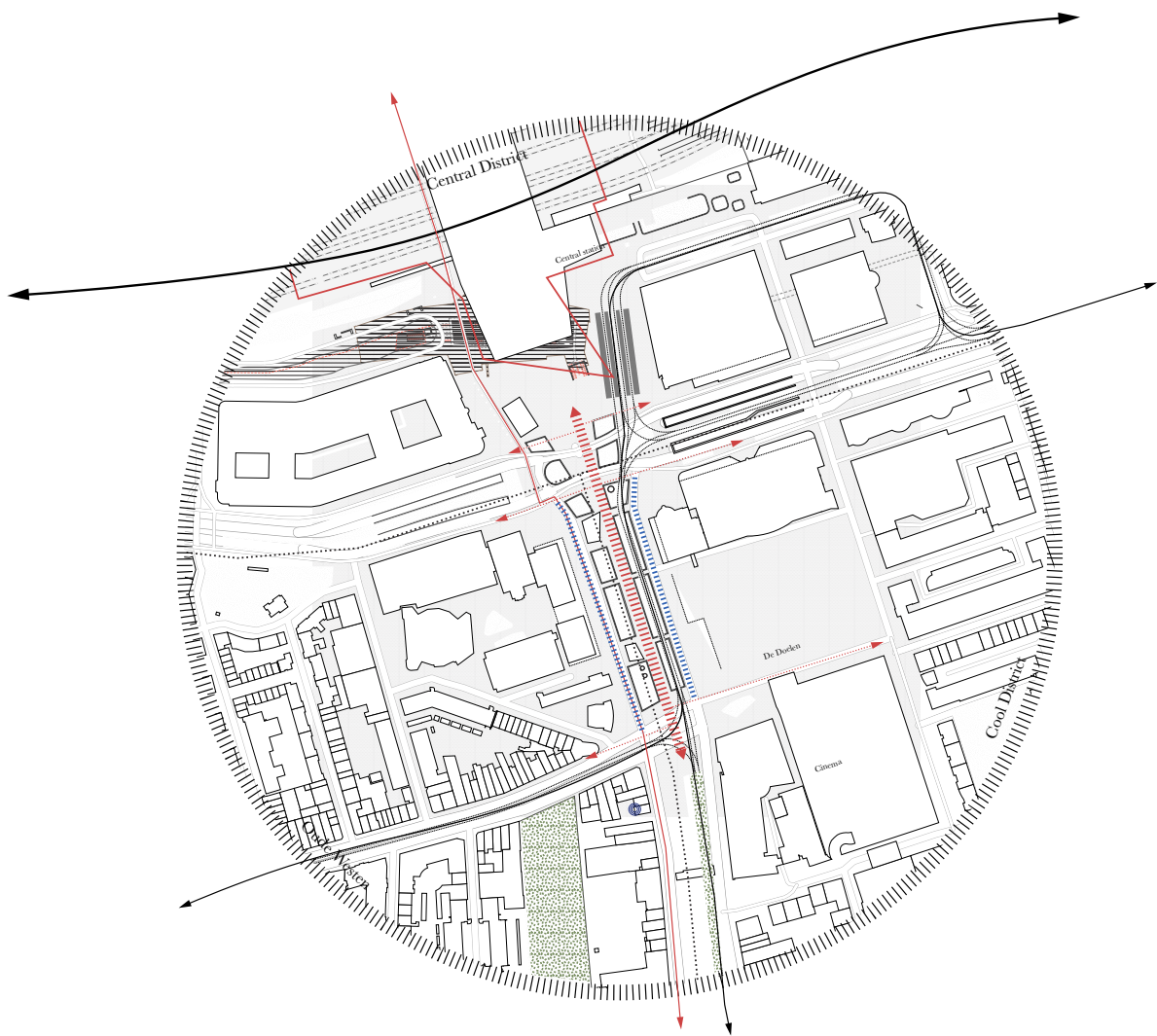
**ELIMINATING THE CAR.** As said before, the area consists of different traffic lanes which are linear to each other. This ensures the limitation of interaction and relations. Because of this different traffic flows, the environment is framed. Therefore, I suggest with this intervention to eliminate the car from the area. The surrounded infrastructure can easily record this, partly due to the underlying parking garage and the underground tunnel which connects the different neighbourhoods for cars.





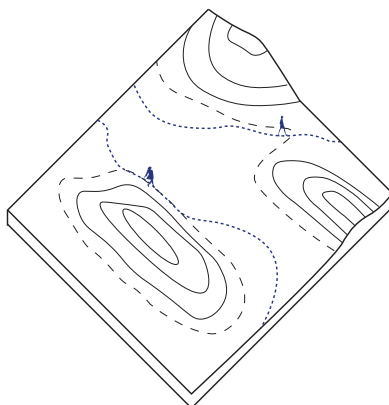




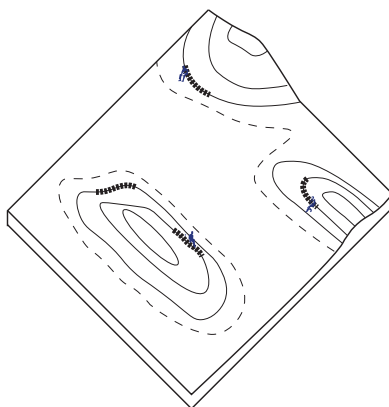


UNDULATION. The elimination of the cars ensures that there is more space in the area, for the cyclists and pedestrians. This ensures that the area can connect the different districts by the use of different adjustments. The adjustments will be created by ground undulating of the area, *staggering the user*. Above the different methods which are implemented by using the research findings related to the architectural elements.

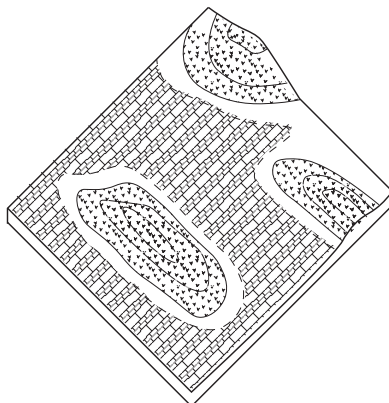
Play with the displacement



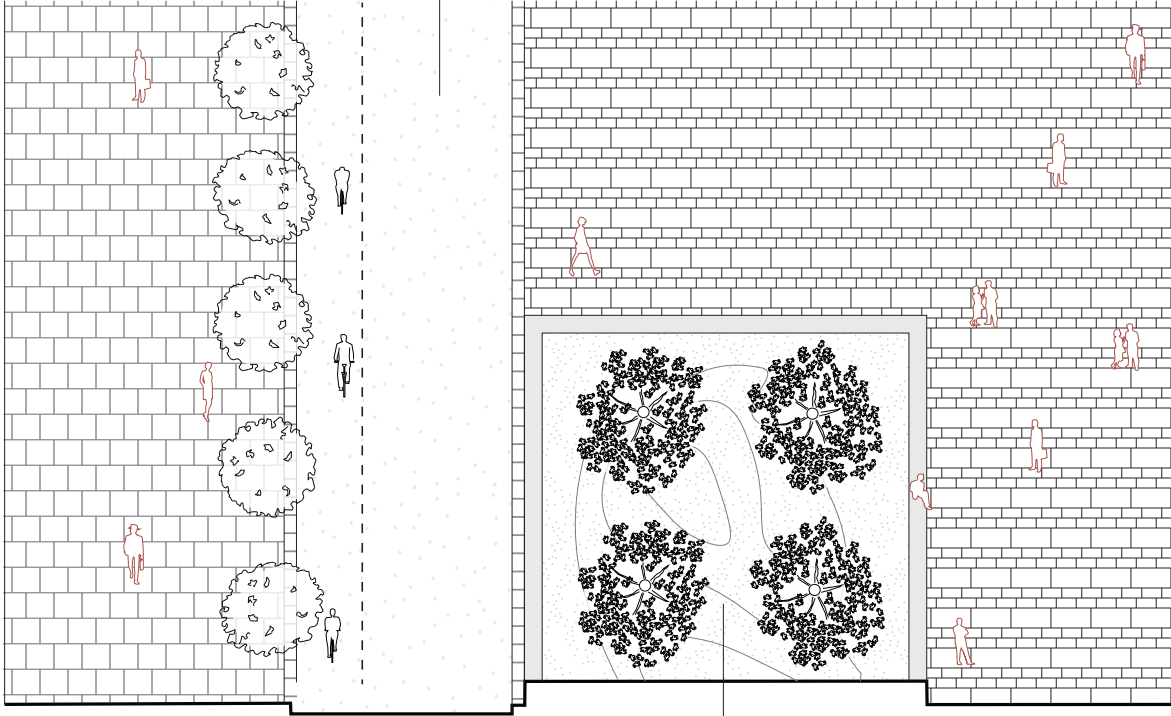
Folding the ground, create differences in heights



Using the materials to blur the boundaries

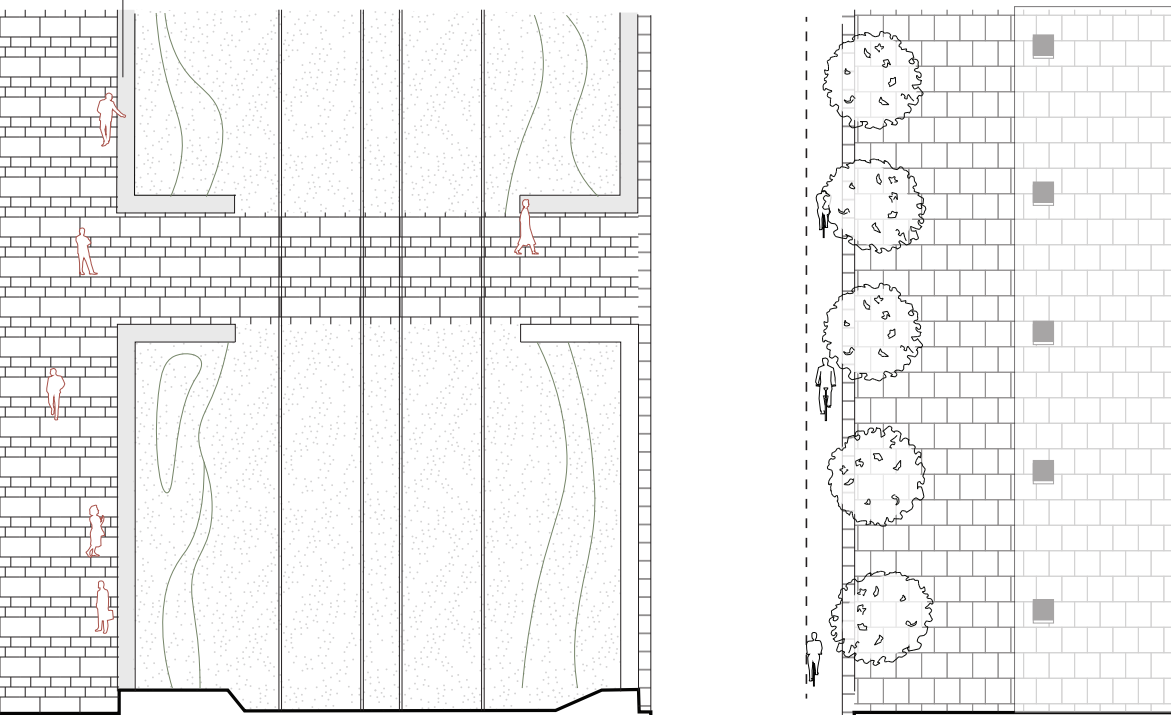


Create less hard  
divisions of functions

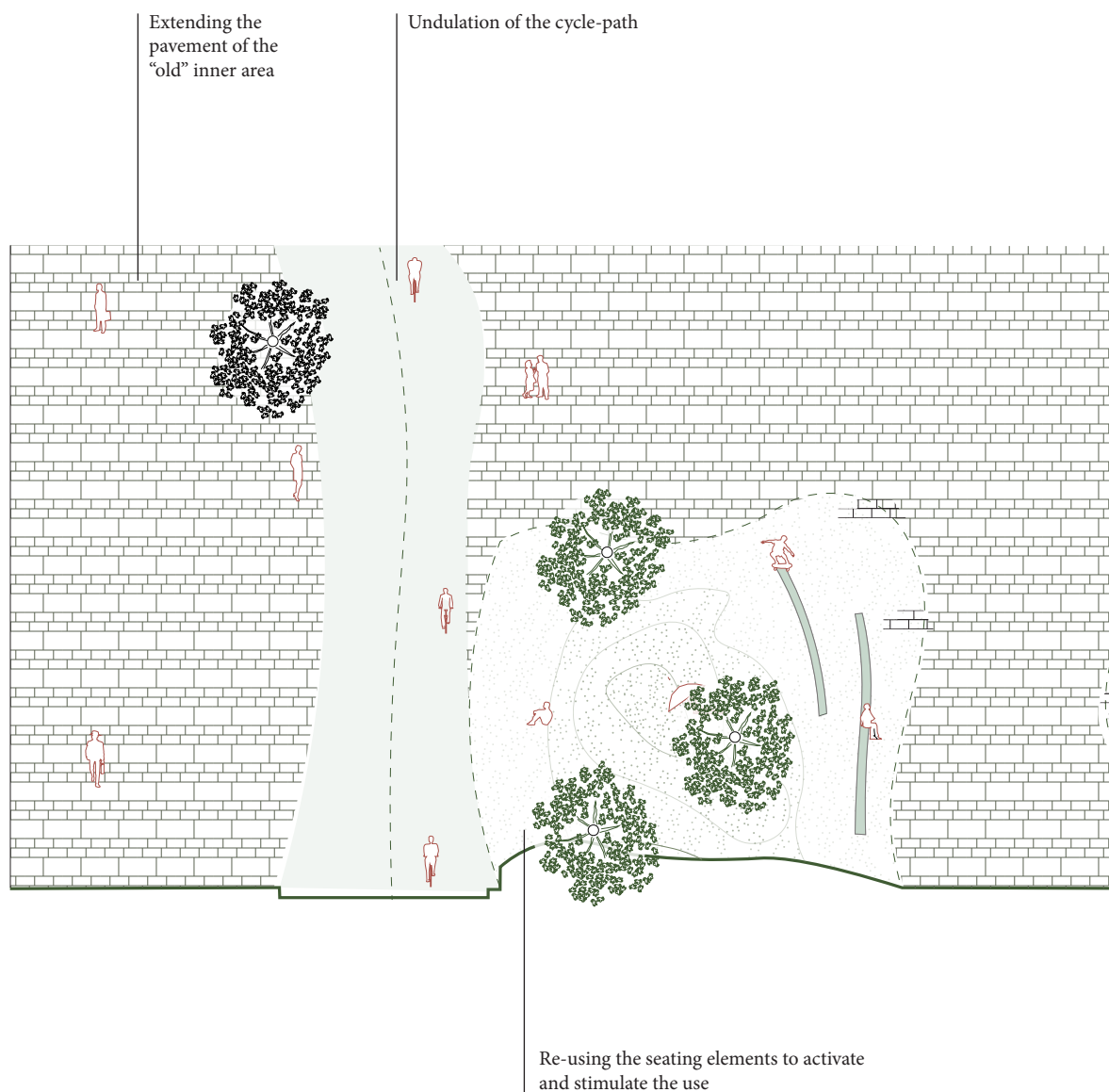


Enlarge the urban structures  
and typography

Break through, the  
hard urban boundaries

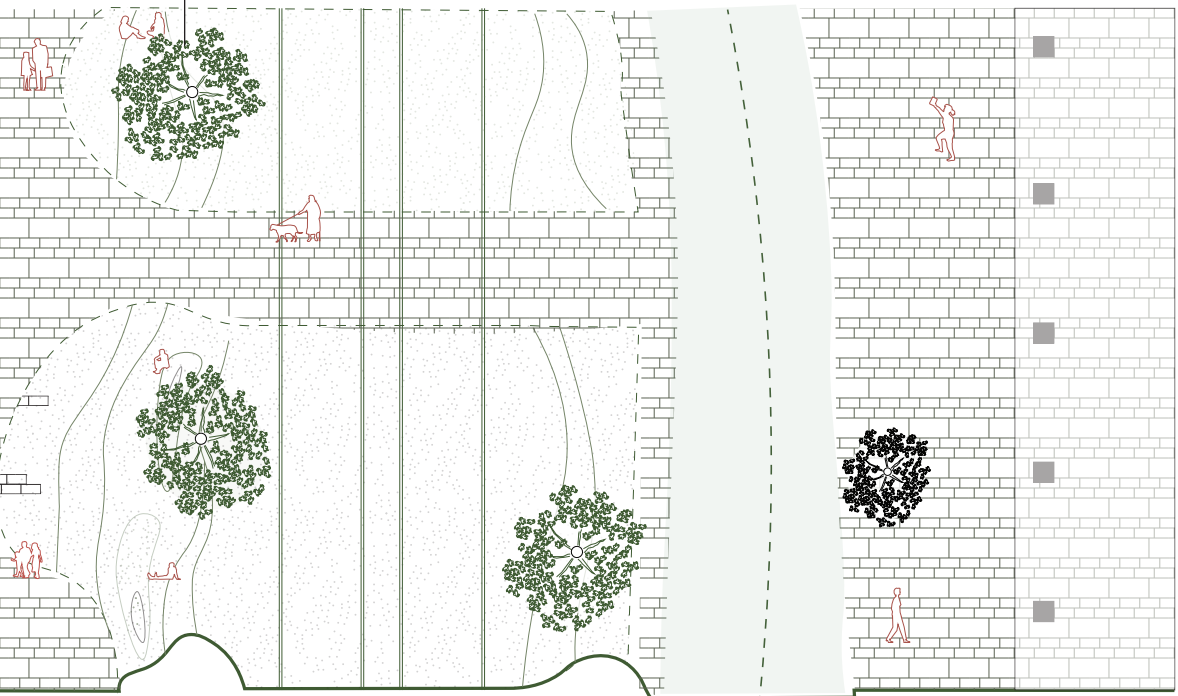


The current situation, as mentioned had different strong urban forms, which limits the use of the area. Through eliminating the car in combination with equalizing the floor, an integrated area will arise. By enlarging the existing landscape typography, the area becomes porous and more intimate.



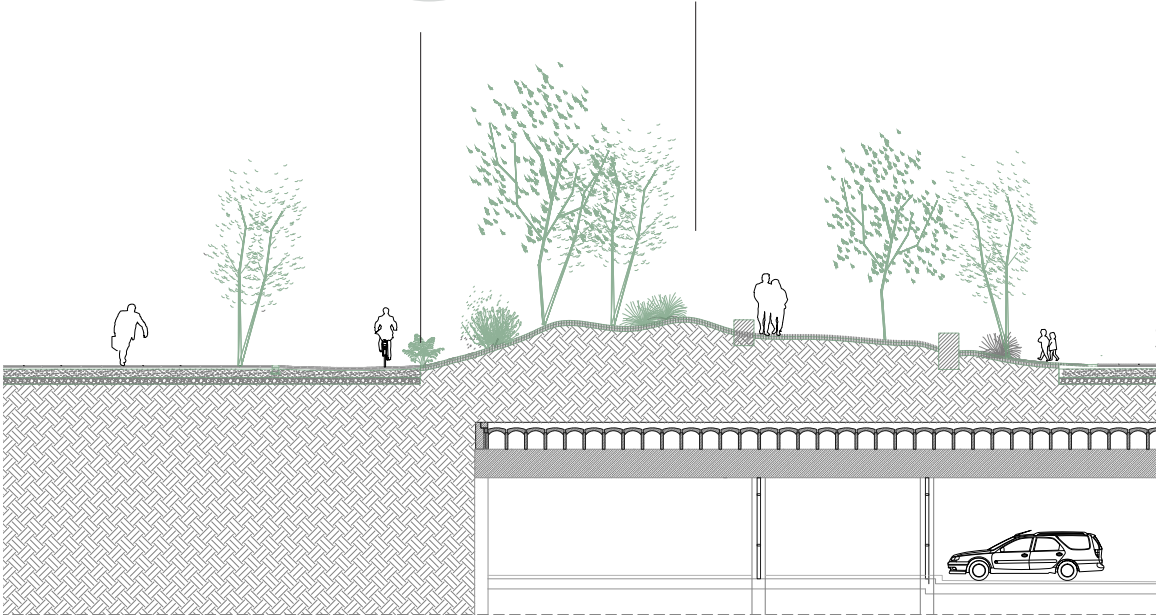
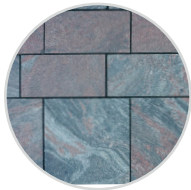
The undulation of the area, creates place for more interaction with the surrounded functions. As it undulates the user to deviate from his or her planned route. The added green areas are enriched with a diverse greenery, including the differences of heights of trees and green (bushes)

Folding the ground  
around the transition space



*Variety of grasses bushes  
and flowers*

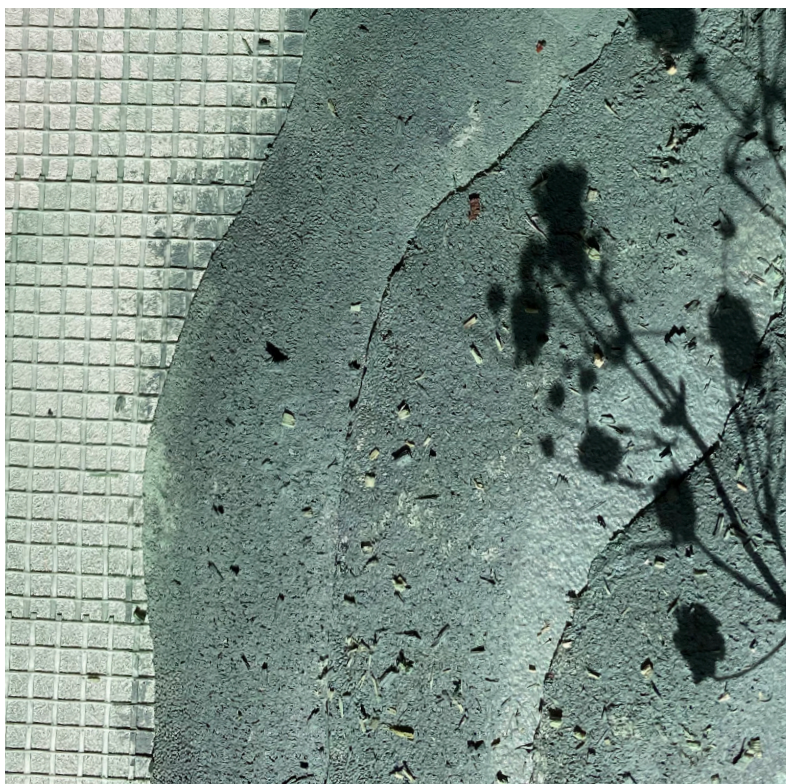
*Reusing the tiles,  
as tapestry*

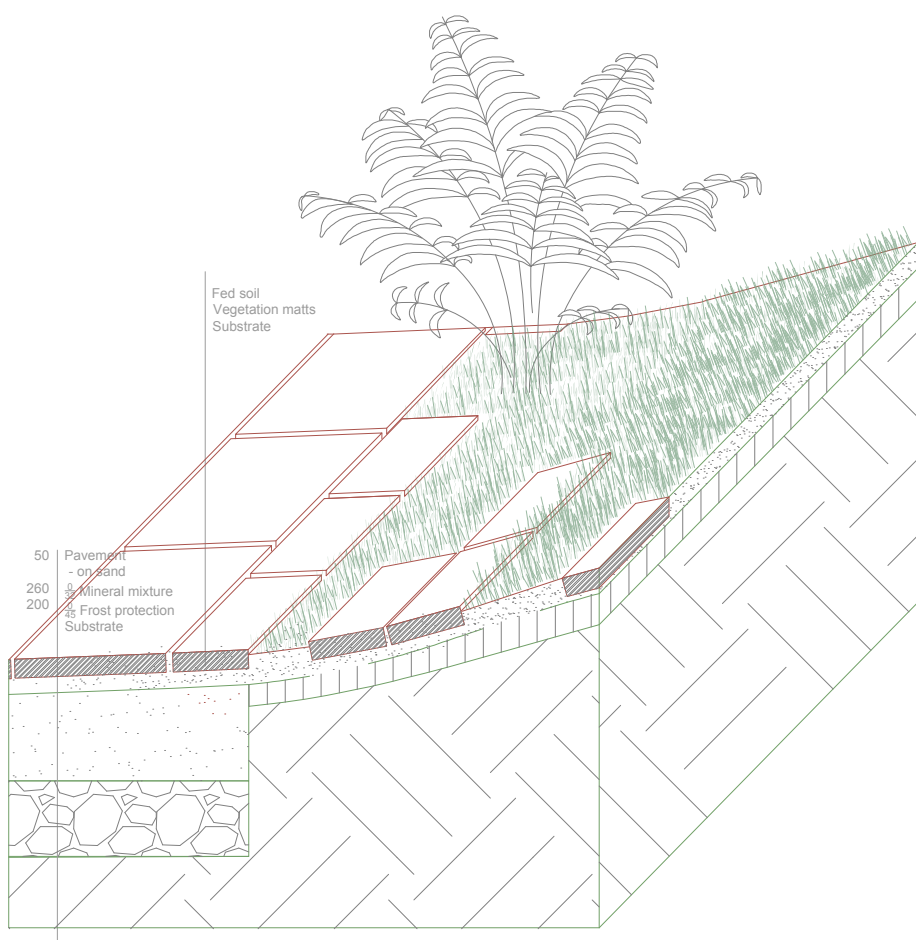




*Reusing boundaries  
in the landscape*



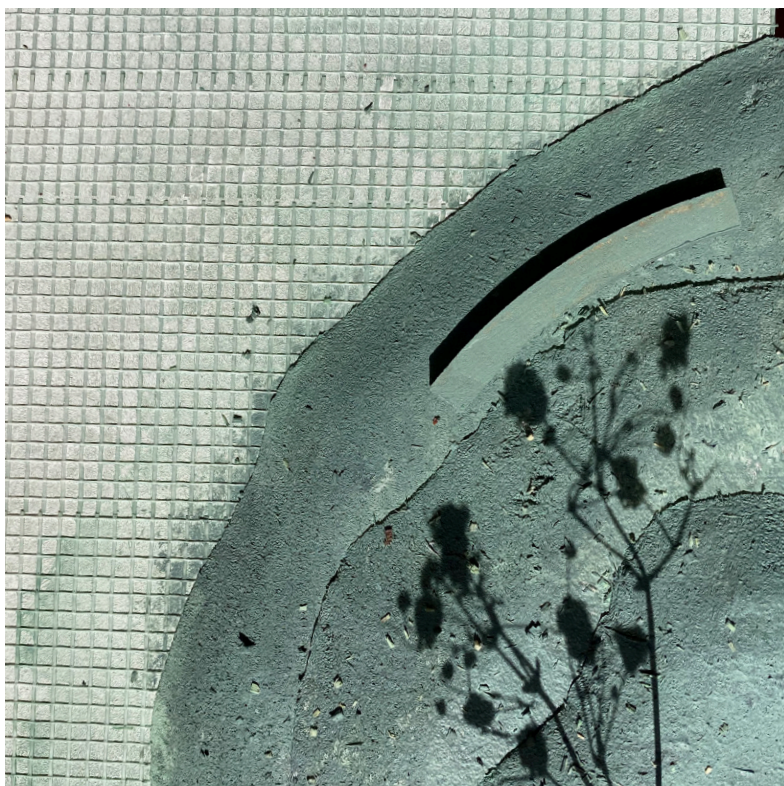


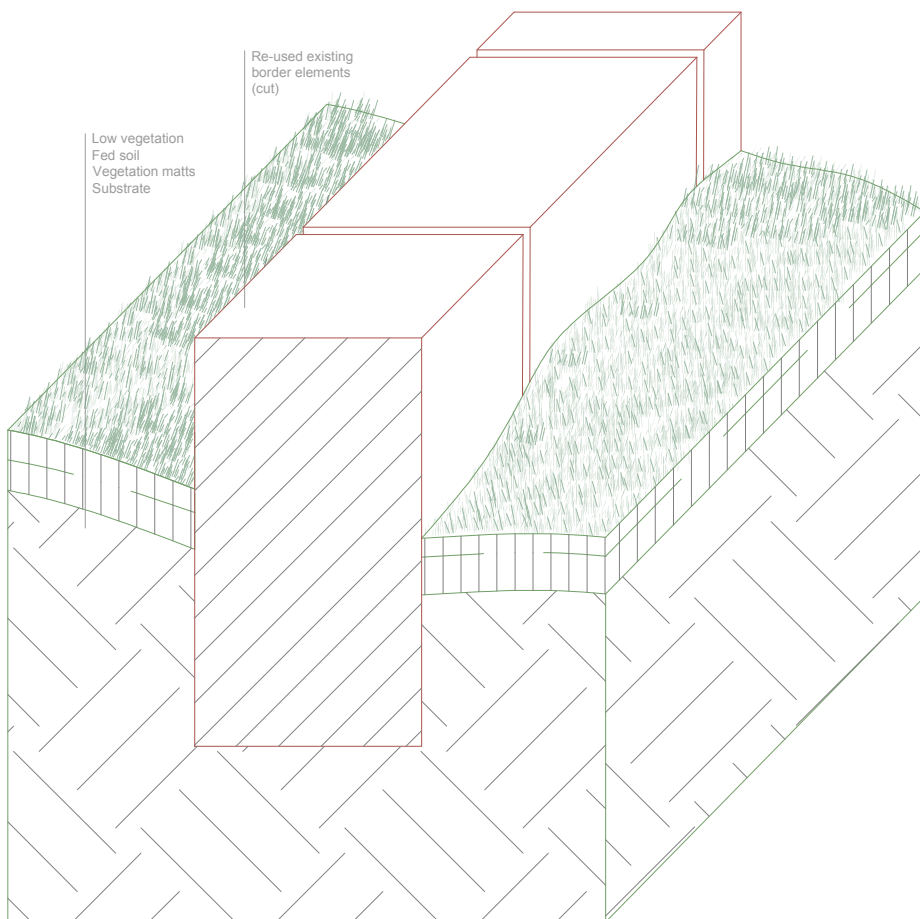


## Urban Detail

### *The living pavement*

The connection of the pavement with the greenery, the intertwined urban deconstruction





### Urban Detail

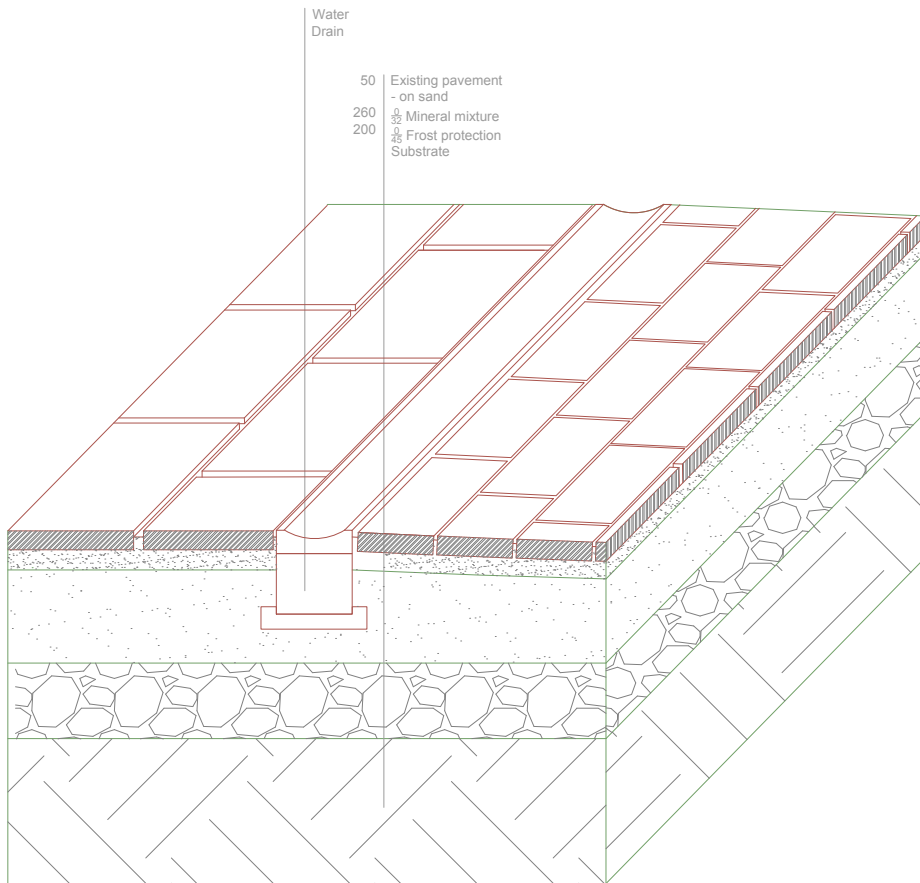
*Reintroducing (use) the edges/wall/platform*

The old edges of the area will be reintroduced and with their sunken character they enriches the use





© Bo Gyllander



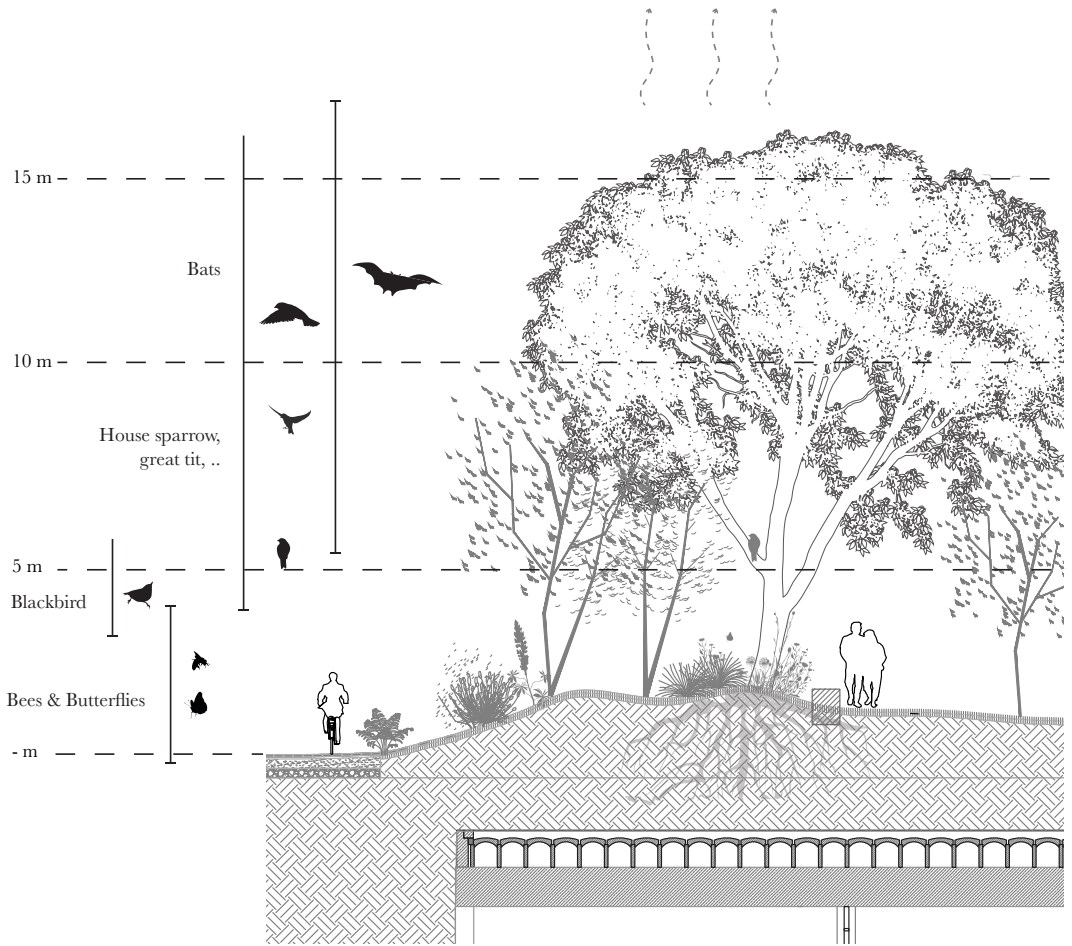
### Urban Detail

*The visible water elements*

The water elements, will natural and nog striking divide the different flows of the area.

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## Positive Cooling effect

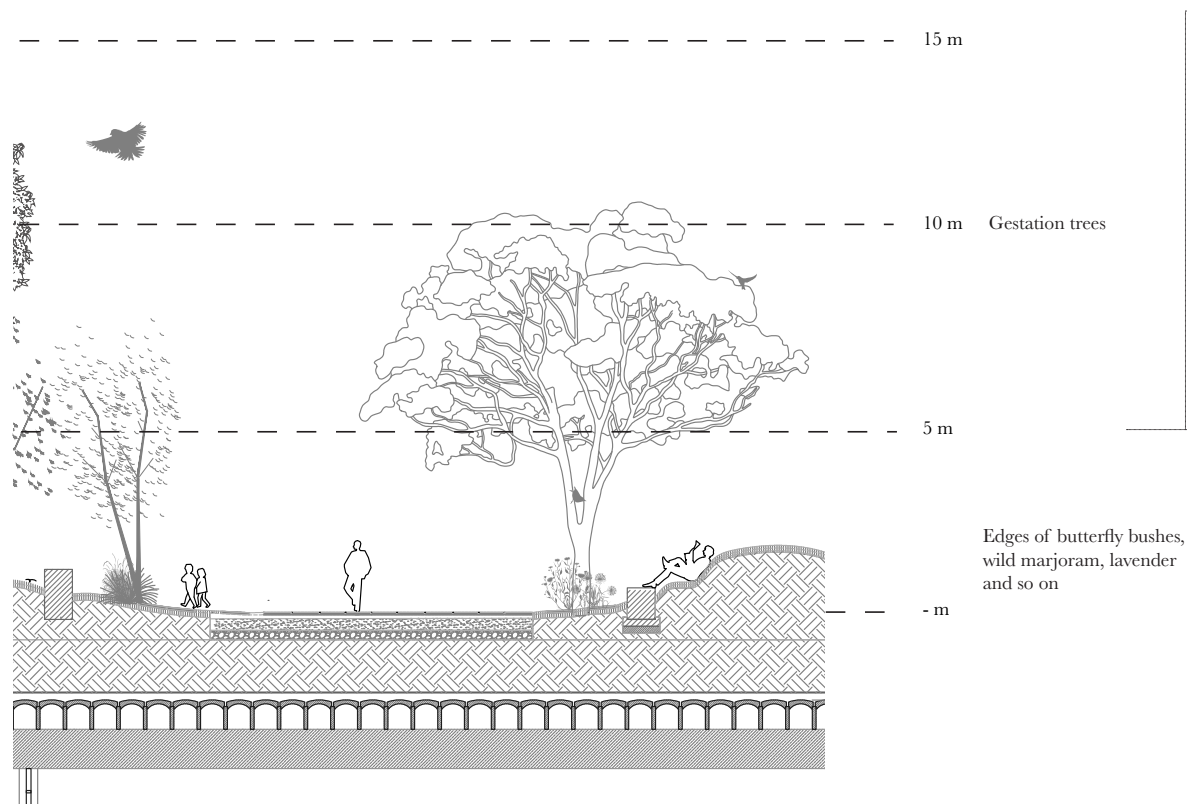


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## Places for the Animal

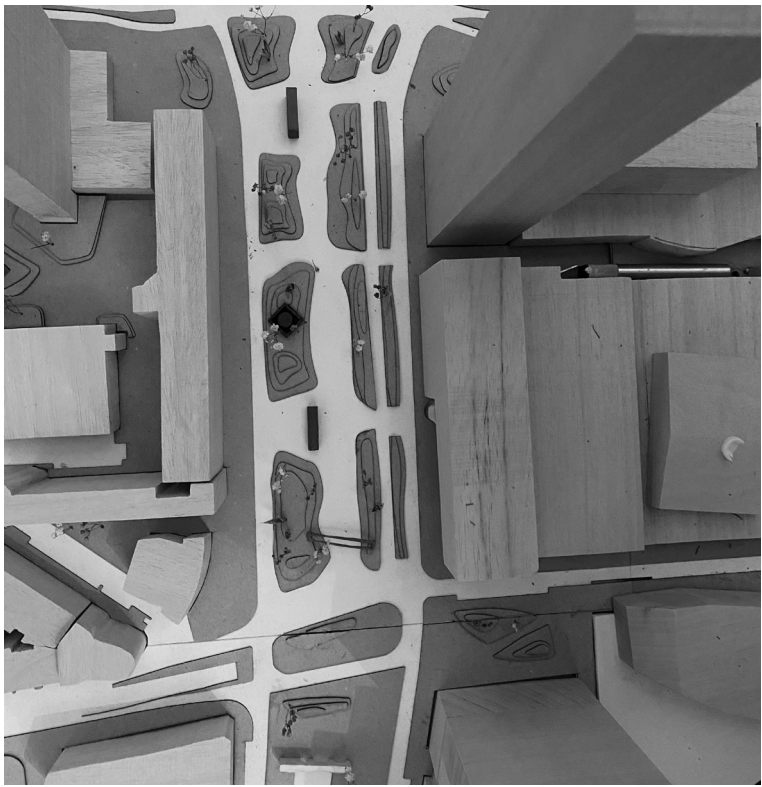


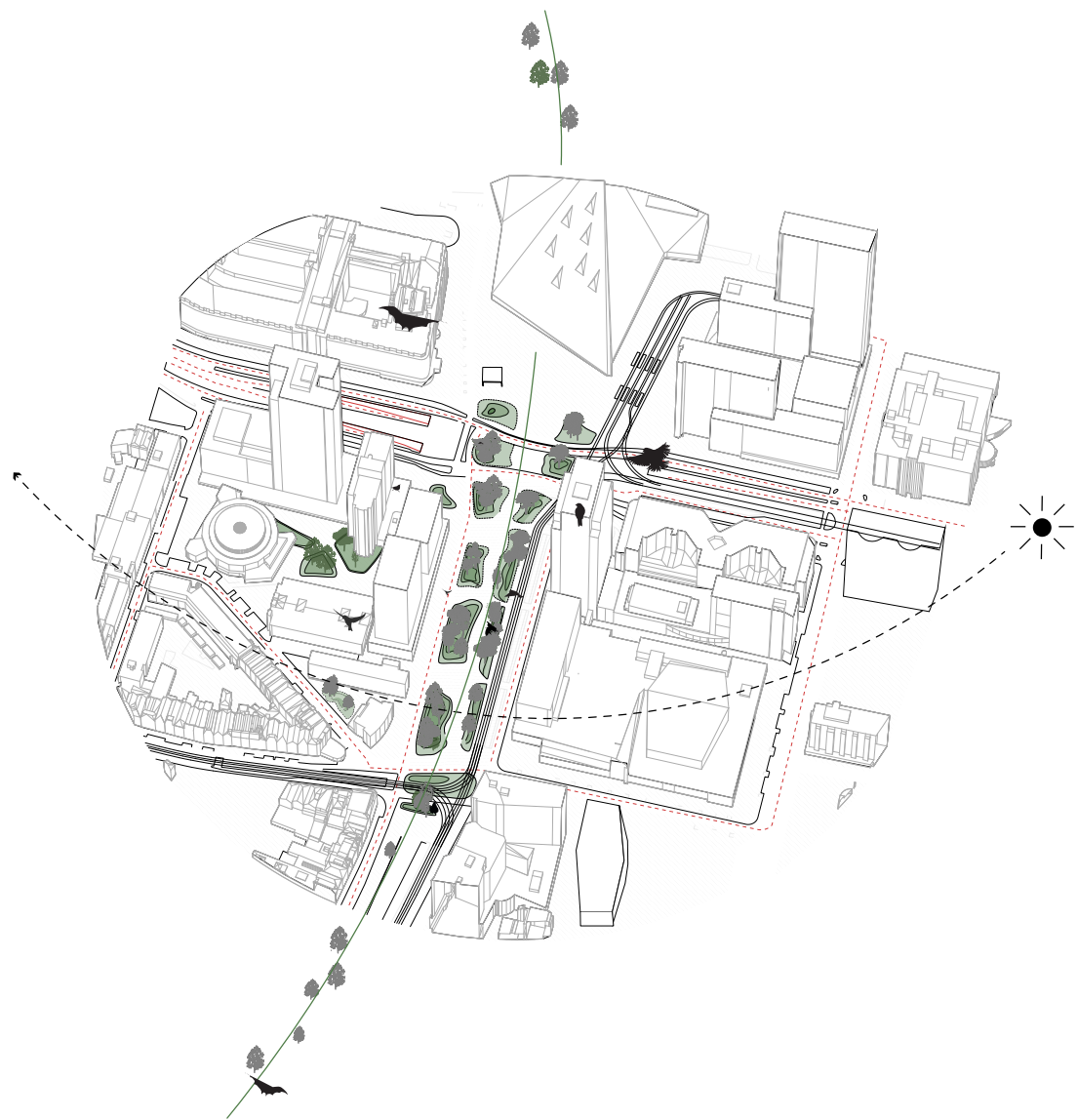
THE HUMAN AND THE ANIMAL. The area is currently filled with a set of design trees in combination with grass. The application of the design not only consists of the undulation but as well is introducing a more diverse greenery. This greenery, will not only have a cooling effect on the environment, but also by enhancing the diversity of greenery to enhance the biodiversity of the area.

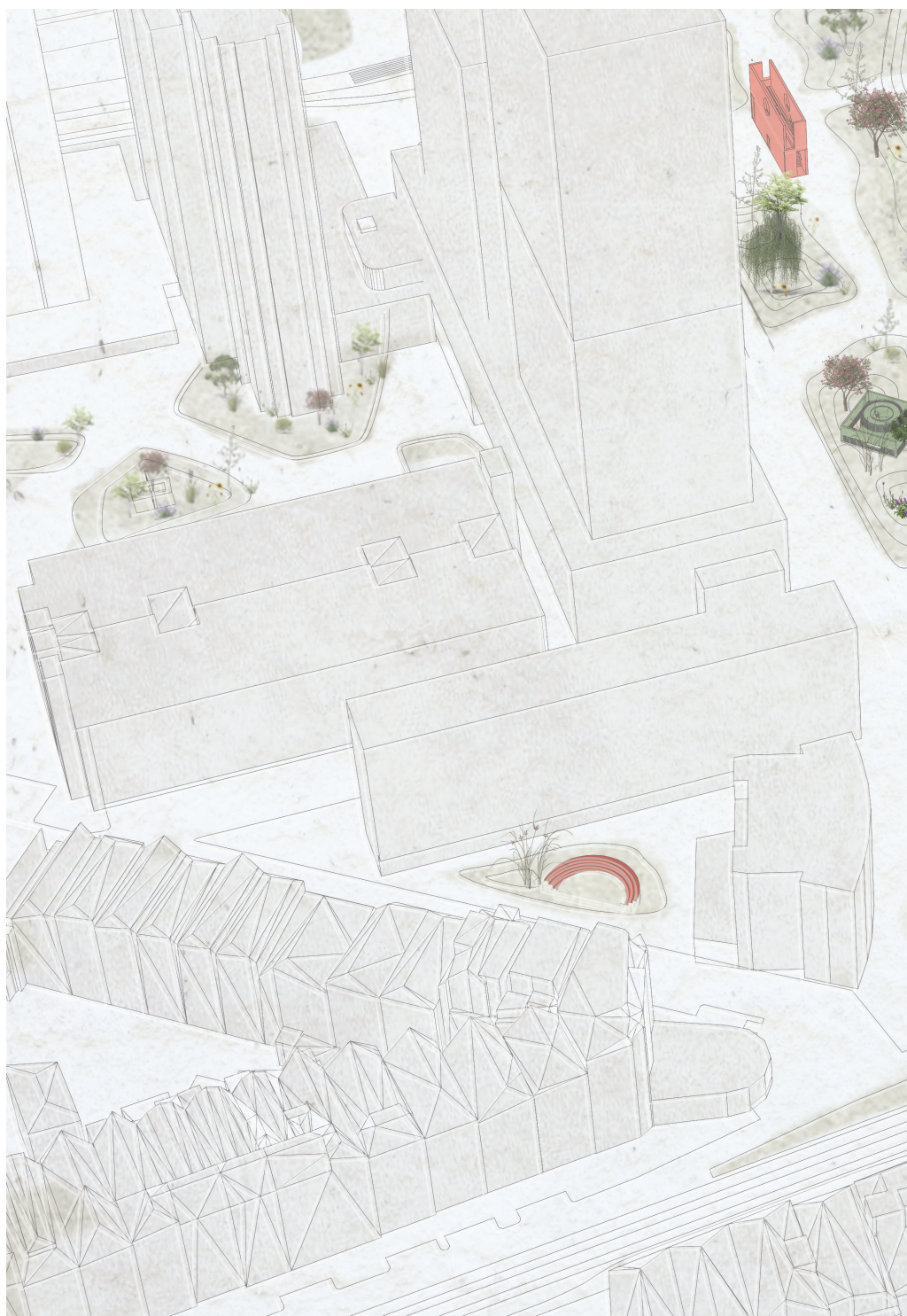


1st, 2nd, 3rd  
Order of trees

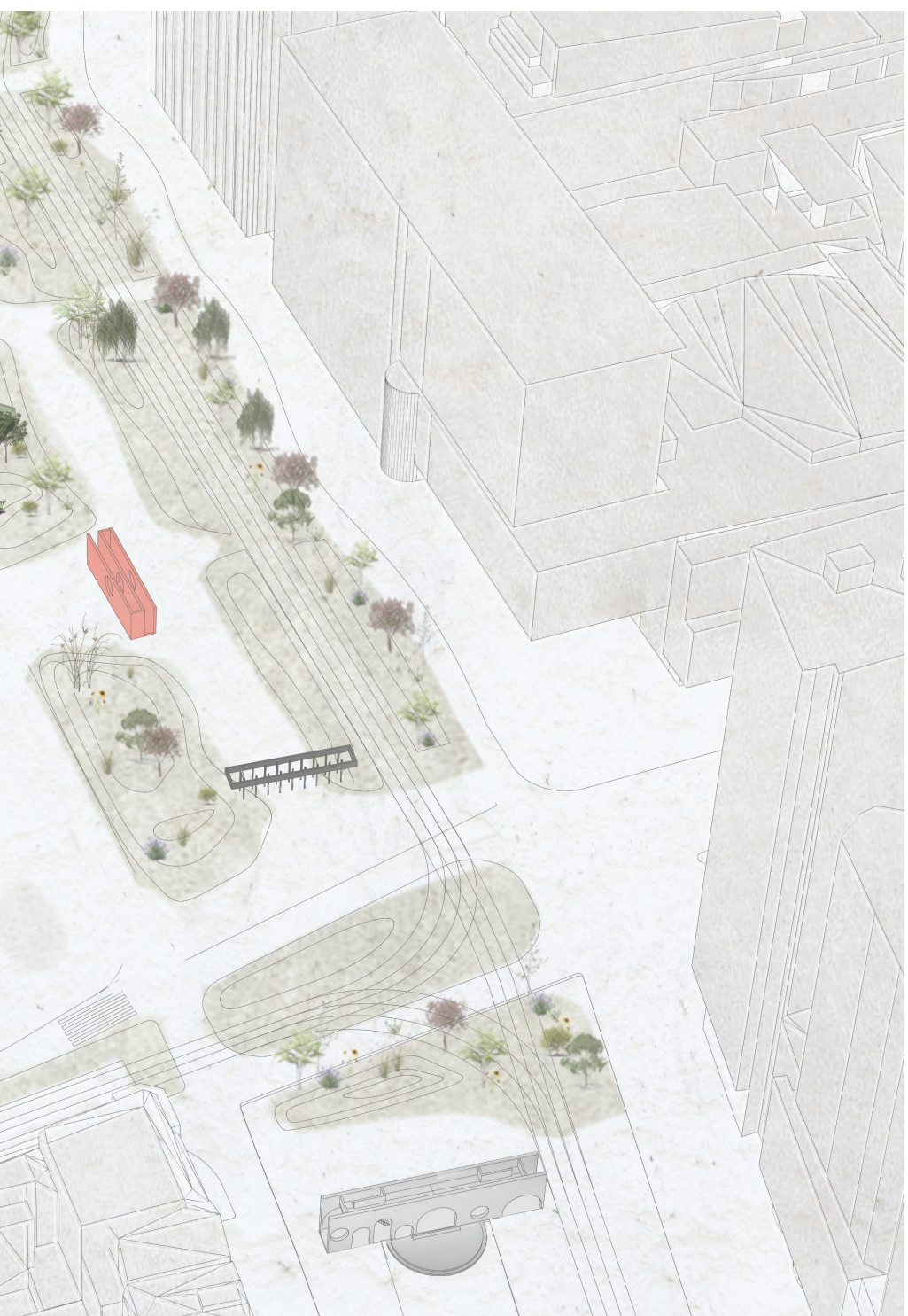
CONTINUOUS GREEN ZONE the urban tapestry with its green character will contribute towards a more diverse Rotterdam, its scenic character will motivate the user to stay, undulate and discover







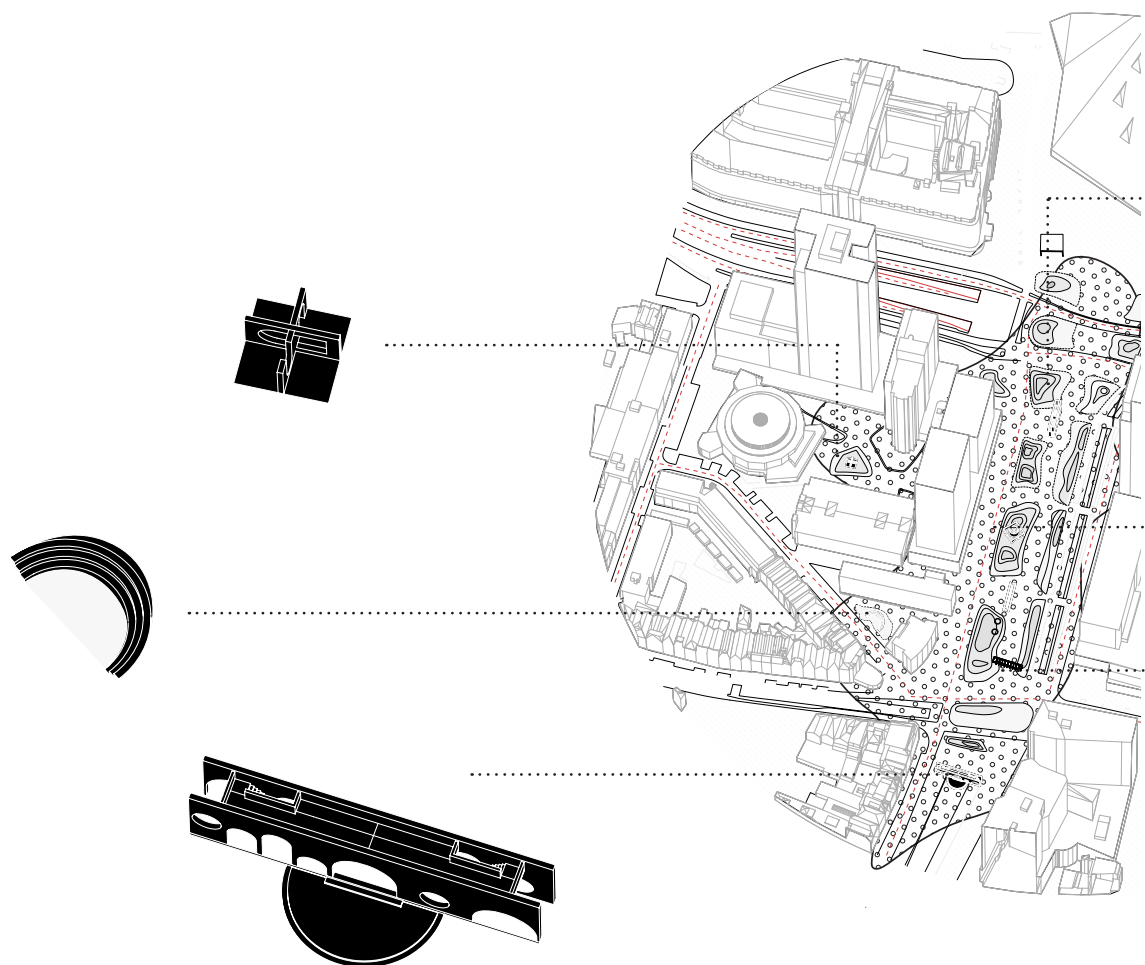




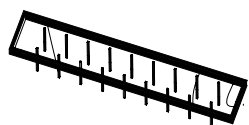
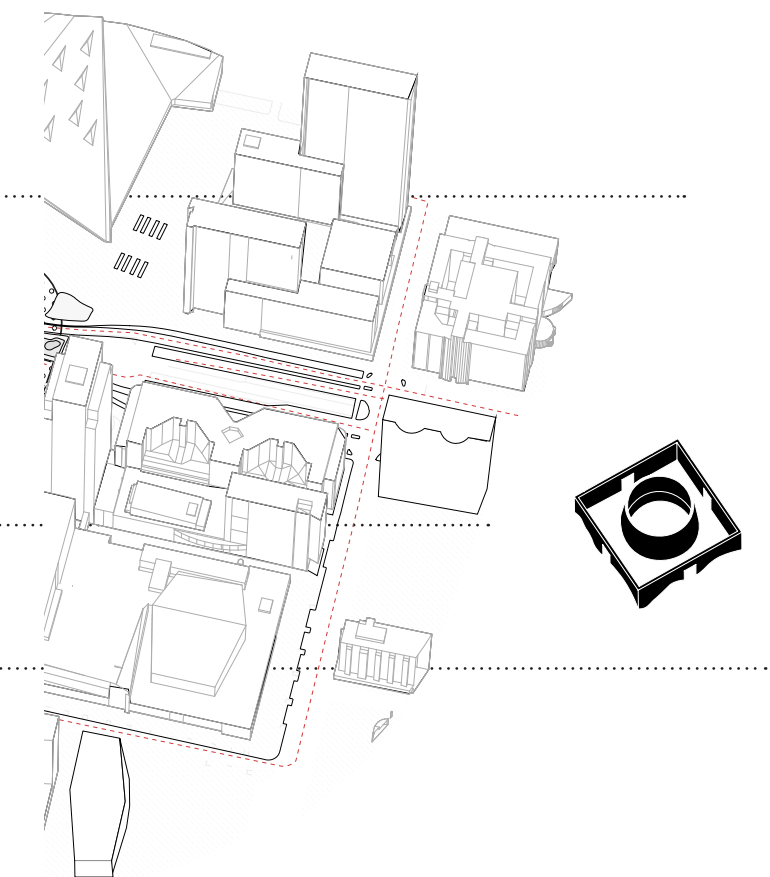
The mediative punctuations  
*Penetrating the landscape*



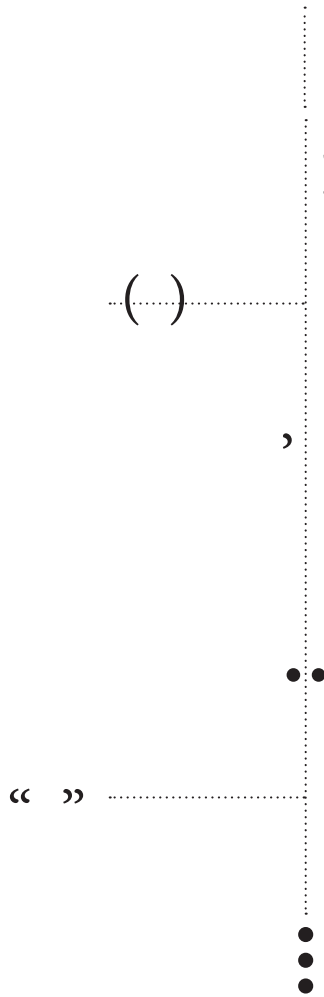
THE PUNCTUATIONS as an example for what architecture can do for the other, show what architecture can do for atmosphere, public space, people. To show how we as bodies can relate to this anti-static objects, becoming object of use and interaction. To show how architecture can broaden the richness of a place





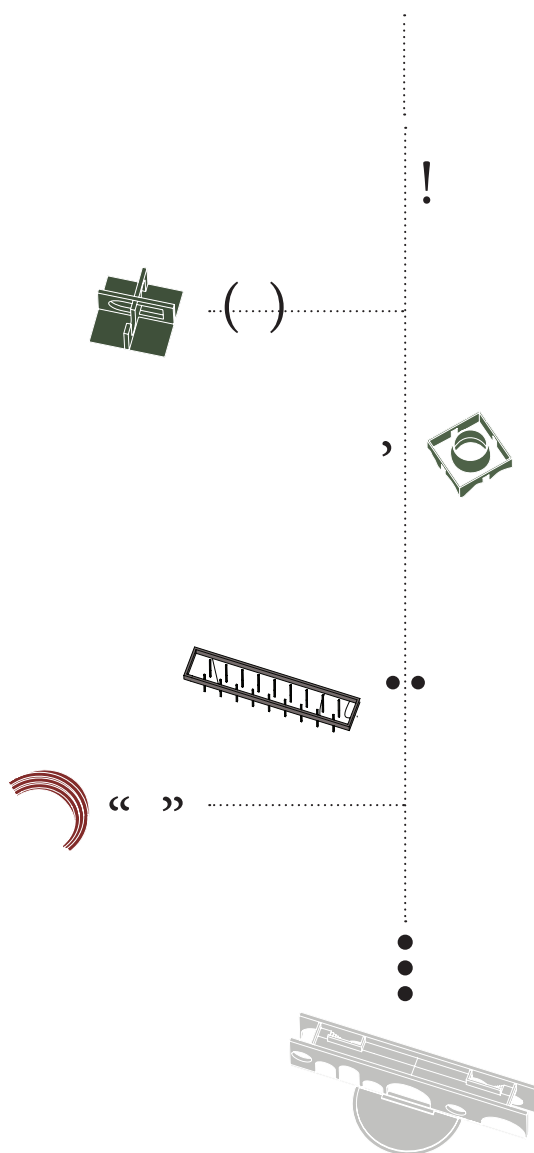


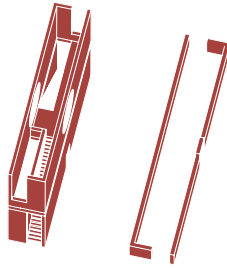
*Place – Role – Performance*



THE CONCEPT these punctuations have the intention to create new relations and interactions to contribute differently towards the environment to contribute towards a more porous transition and at the same time create awareness of the surroundings and sometimes give new insights. The interventions, are related to a punctuation which beside mediating also relate to its surroundings.

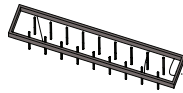
THEIR ROLE AND APPEARANCE the different interventions, will arise after the landscape is adjusted. Over a time span of 10-15 year the pavilions will appear to strengthen the area and create more spaces and places for interaction. The image below, shows an abstraction of the floorplan of the area, On the right is shown in what order they will arise and what the influence is on the environment





### The Appeal

*This will introduce the area, create an overview and offers the possibilities to see the development and change over time*



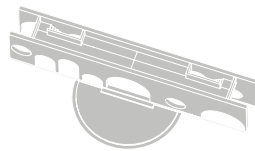
### The gate

*by adding this threshold in the area, it will smoothly introduce the other side. Its sunken character in the green surroundings will create more places of stay and meet*



### The Garden & The performer

*It will link the neighbours (inhabitants and staff) with the area to as well introduce this as a extension of the neighbourhood/working district*

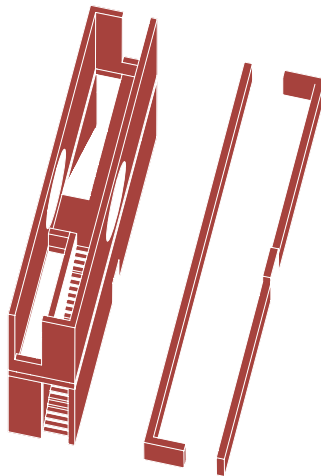


### The reveal

*It's rough and long appearance will close off and connect the area with the city (existence) to reintroduce the water and the green character of the hidden lane.*

*This last intervention will also ensure the intergration of the area an bring back together the different disctricts*

THE APPEAL will be introduced firstly, to get attention of the new tapestry of the area. This first intervention and its given punctuation “the acclamation mark”, will provide the area of an entrance elements, which will surprise the user and as a first step bringing back the human scale. Besides is long narrow appearance, the integrated elements will arouse curiosity and make the user aware of its surroundings, create new relations, vertically and horizontally. It will shape the cityscape and will also serve as a point of reference in the area and where the development of the area and its changes will be visible. The intervention consists of two parts which are connect with its appearance also connected through the underlying (7 layers) parking garage.

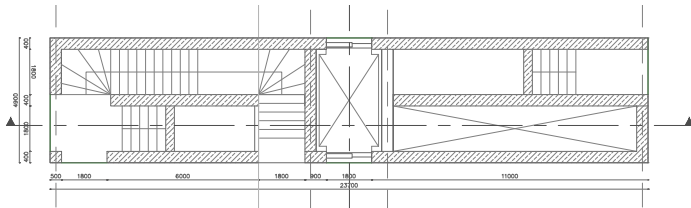
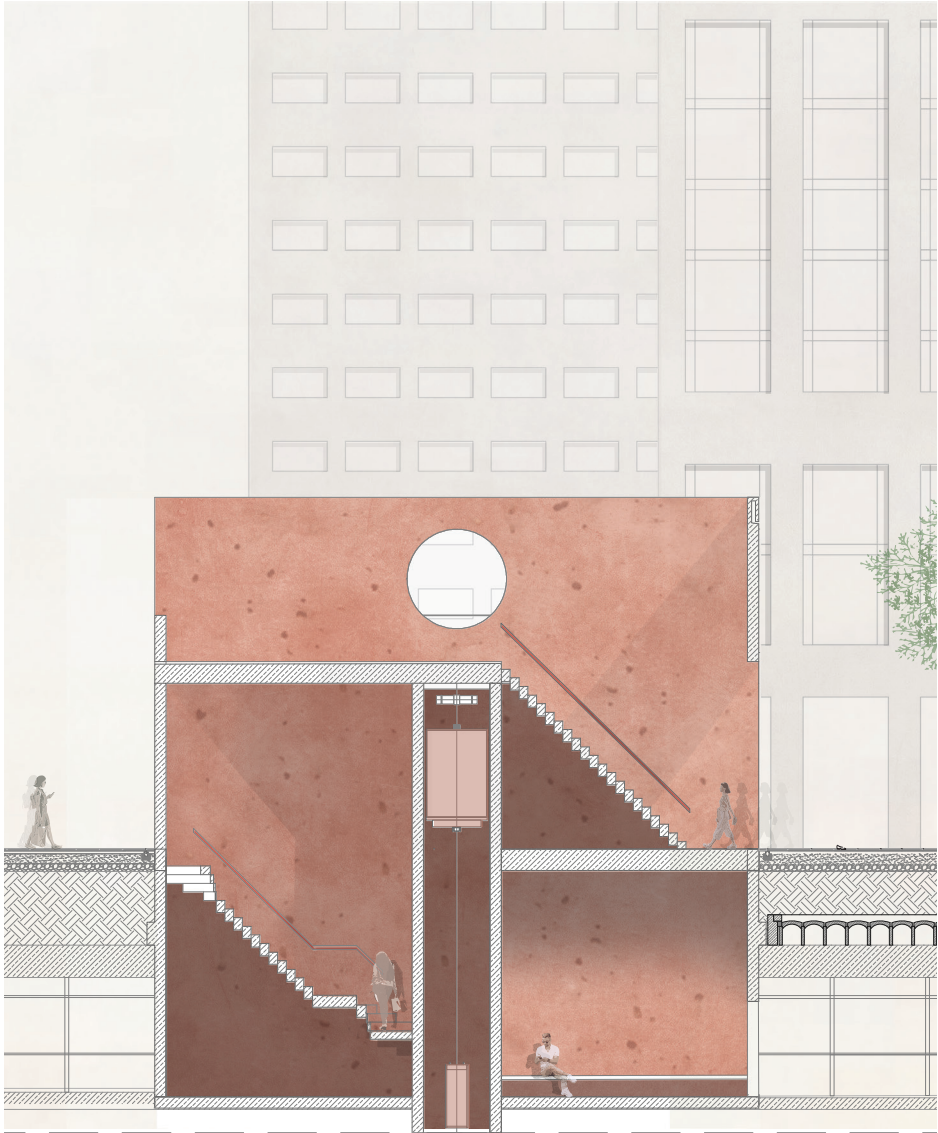




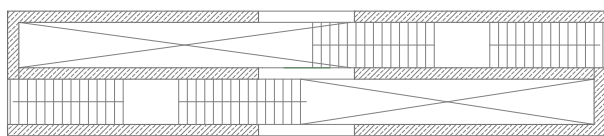
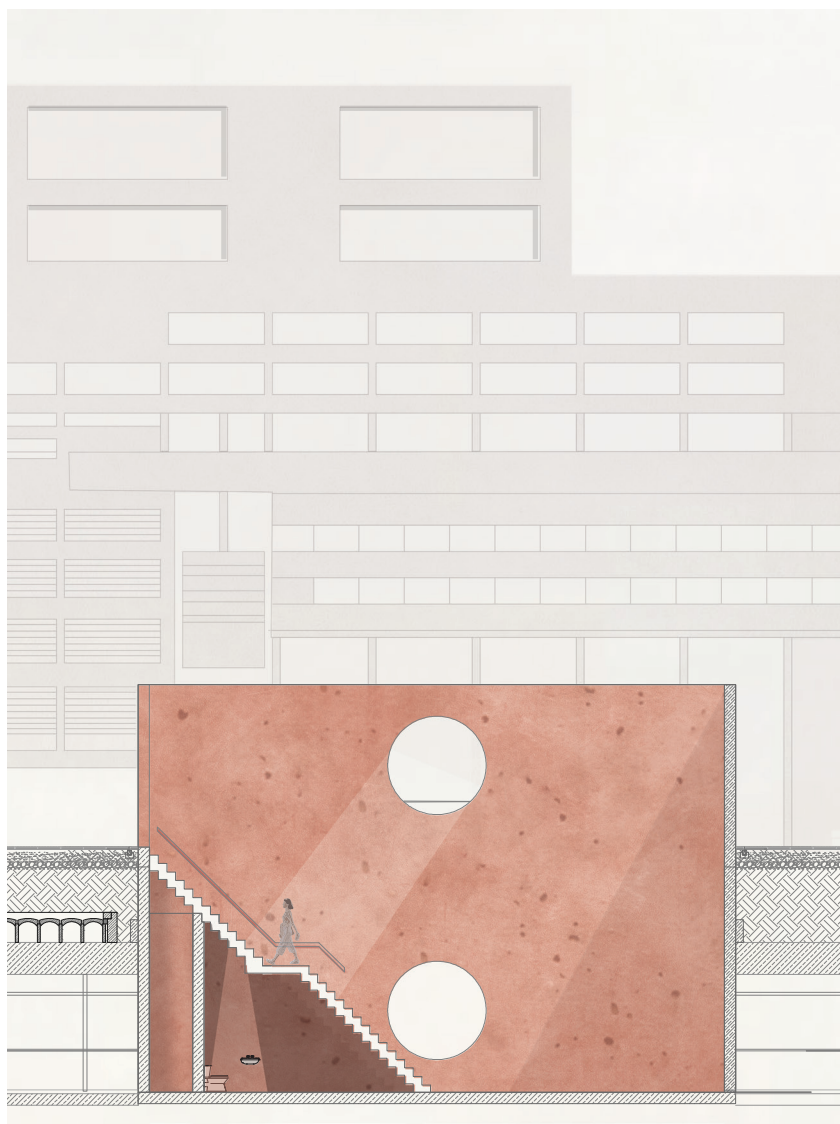








Section & Floorplan Appeal A  
1:200



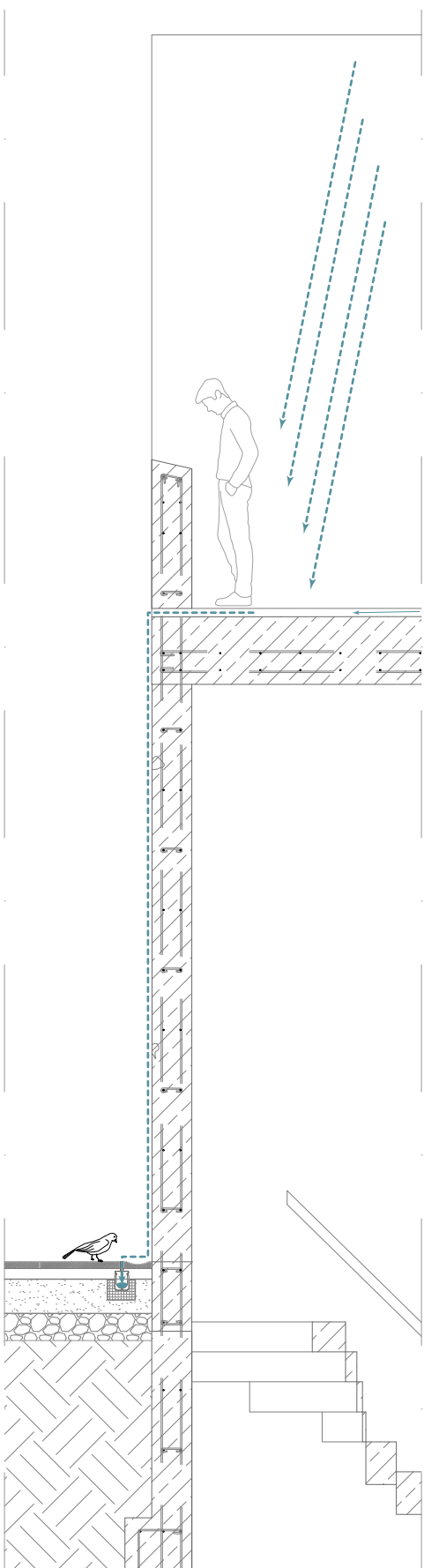
Section & Floorplan Appeal B  
1:200



THE ENTRANCE while approaching the area, the interpunction will be visible. From a distance its visible to look inside, see the movement because of its openings, facing the area from 4 different sides. When getting closer, the stairs will be visible, which arise curiosity to wonder what's upstairs. Realising when taking the first steps, the stairs on the left side are conspicuous, they offer you to go downstairs. step by step, while touching the building, through its integrated handrail.



THE WATER GRADIENT because of the open character of the interpunction it will rain inwards. The water will be drained through the facade by small openings. Besides offering the water, it will also give the facade over time a different character and appearance.



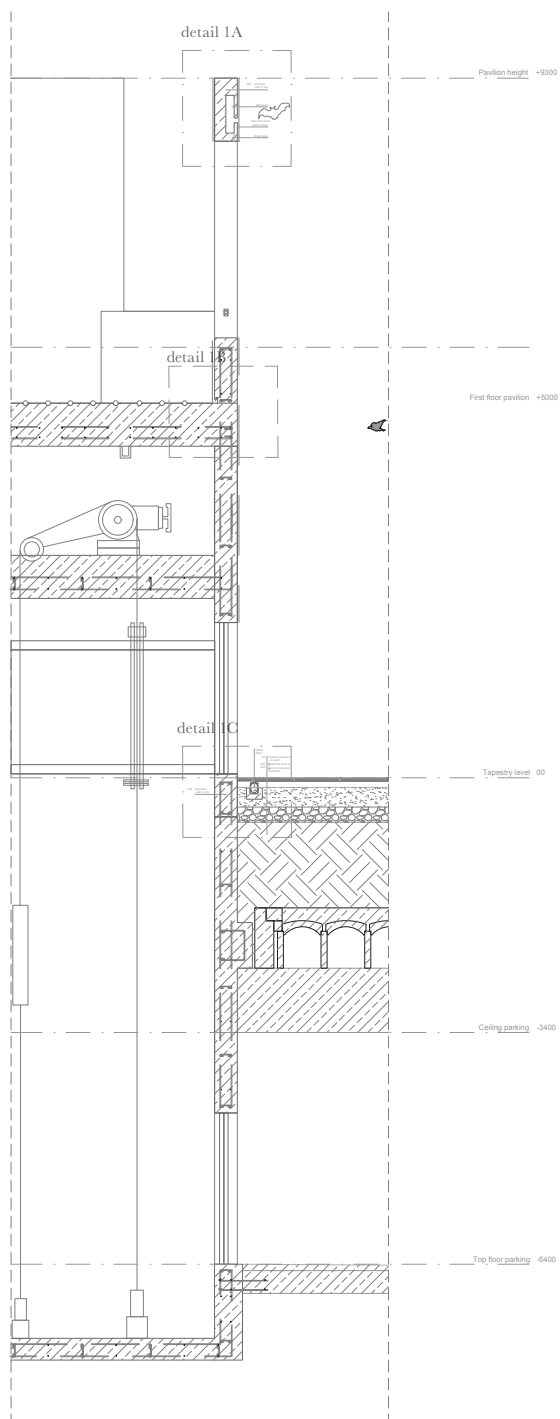






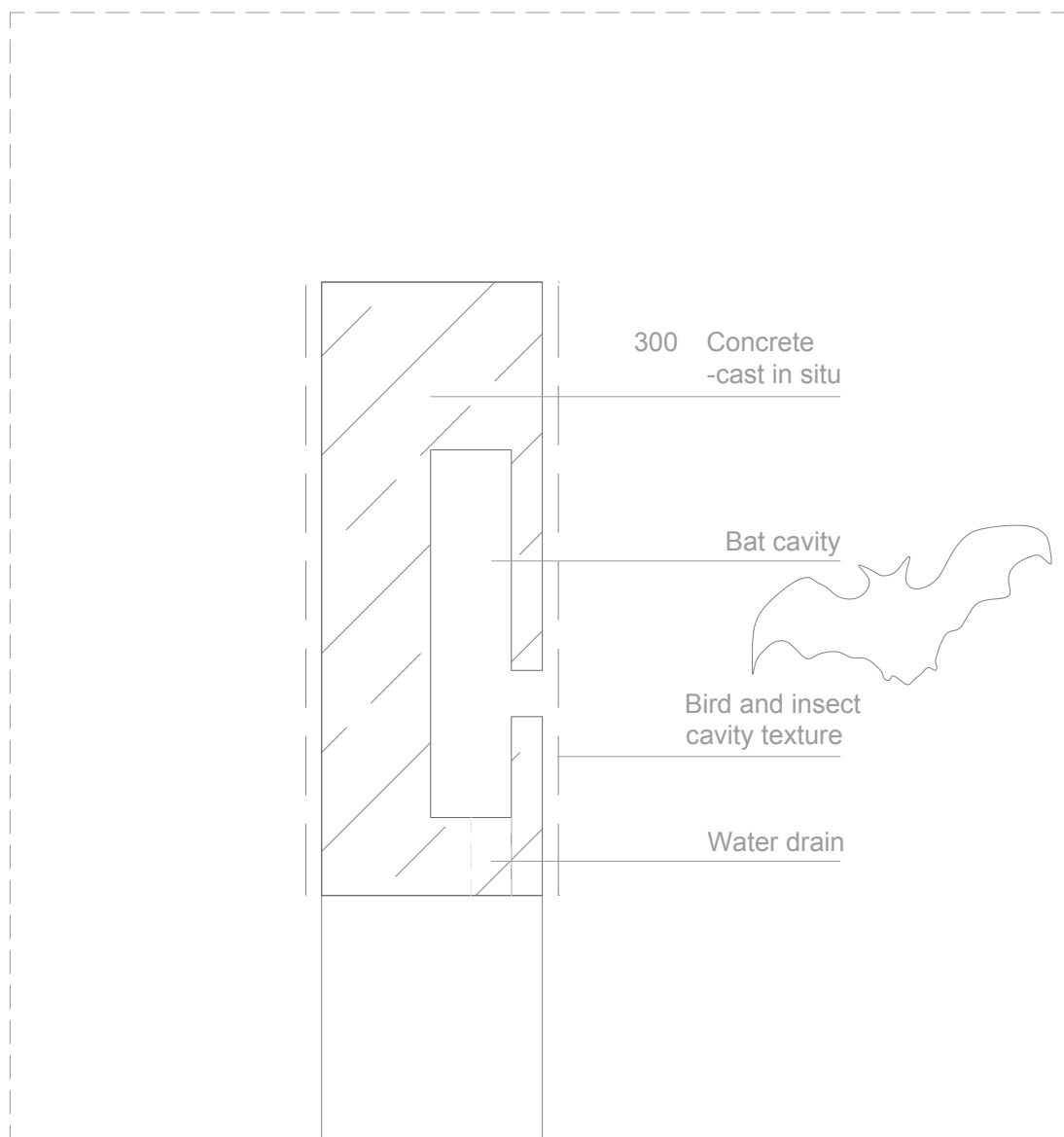




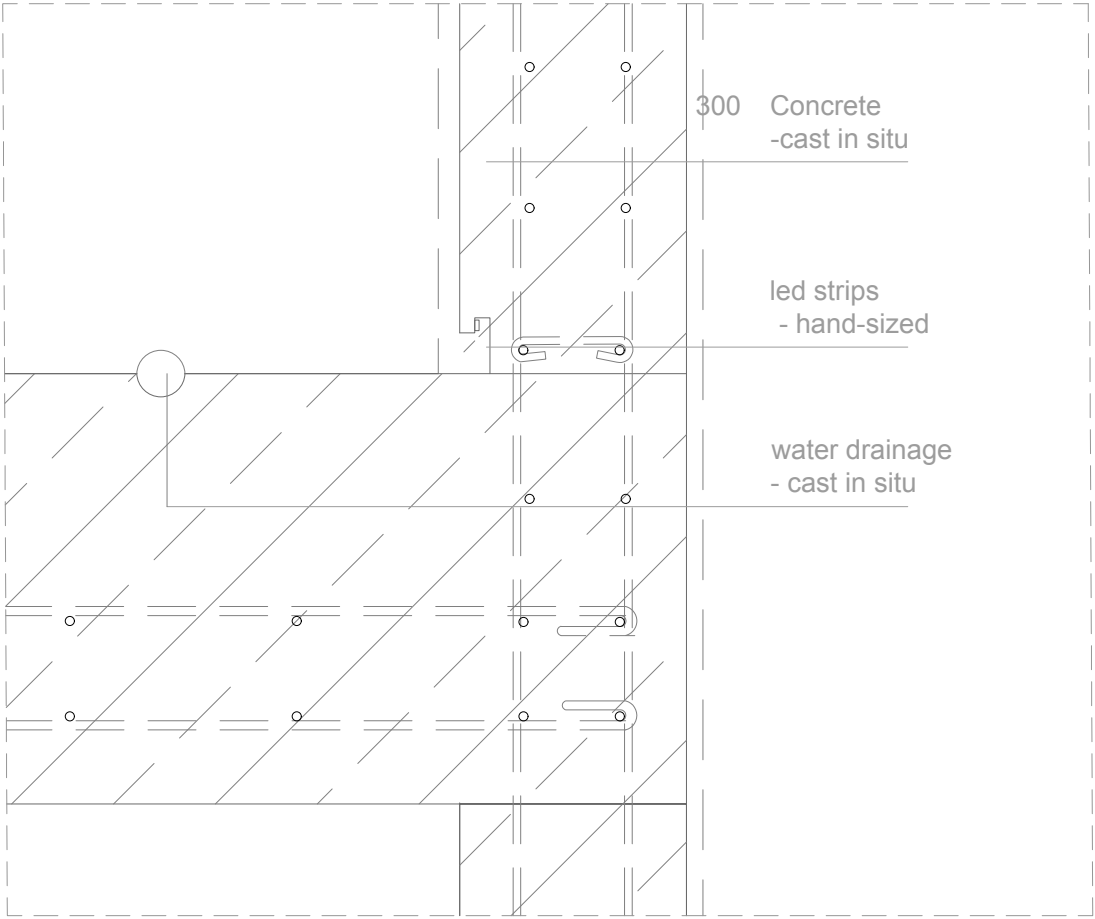


Technical Section  
1:100

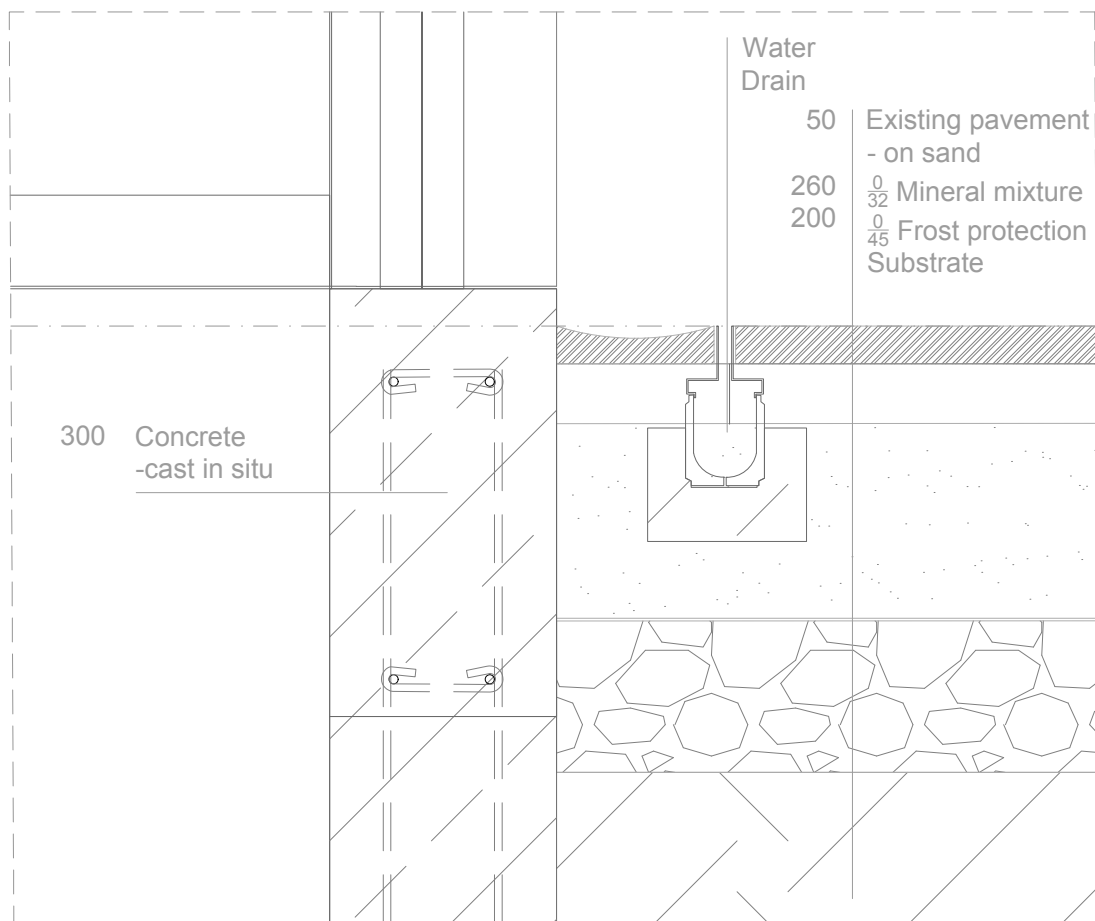




Detail 1A facade  
*1:10*



Detail 1C facade/flooring  
*1:10*



Detail 1C facade/pavement  
1:10





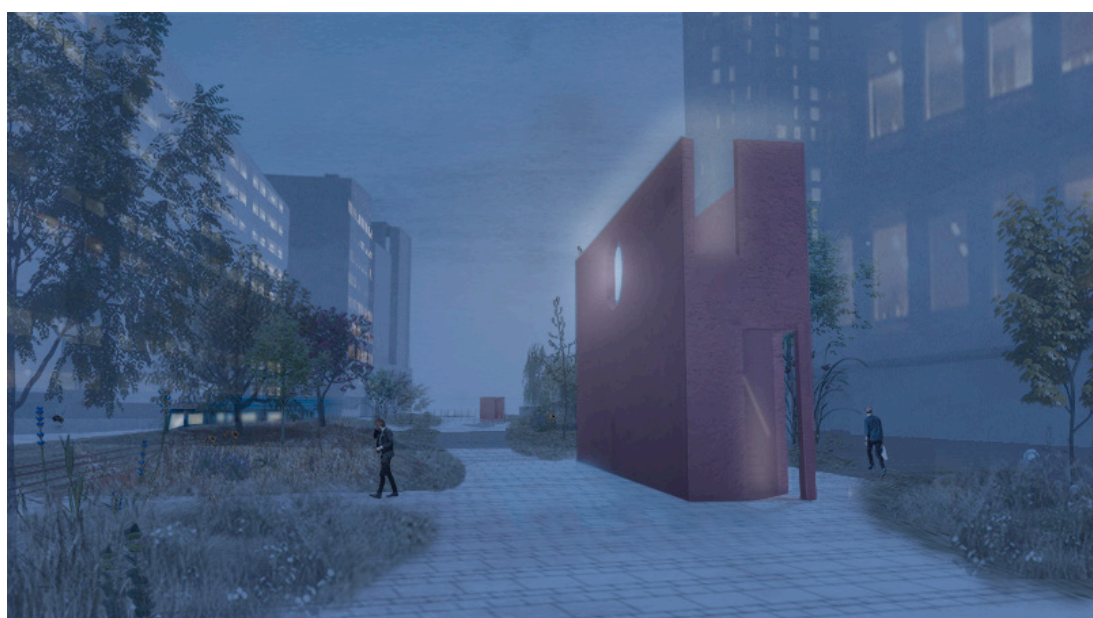








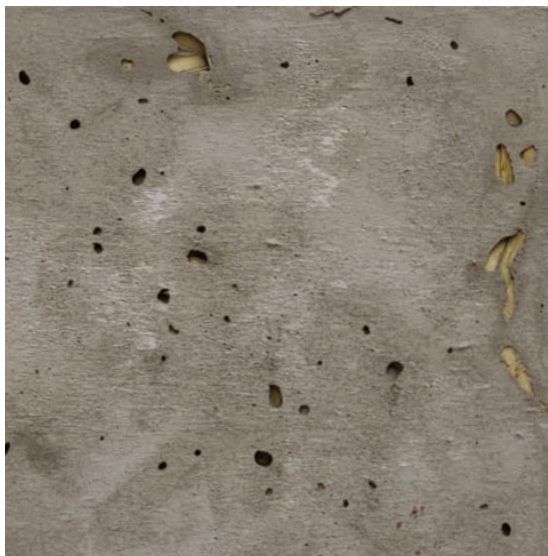
DAY AND NIGHT besides its daily function it also contributes for the social security of the area. The interjunctions will light up in the evening.





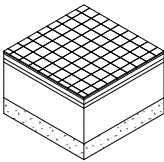
Material sample  
*1:10*



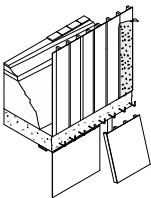


Material sample  
*1:10*

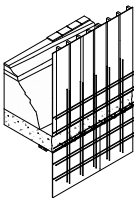
Creating  
the Structure



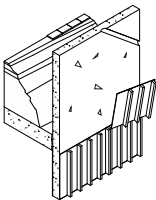
The base



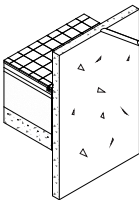
Formwork exterior  
adding the textured mats



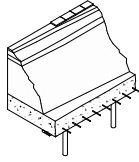
Reinforcing  
connecting the existing and  
new reinforcement



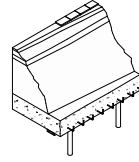
De-constructing  
detaching the mats, ready for re-use



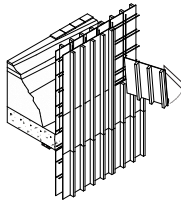
Finishing  
adding the drainage system and pavement



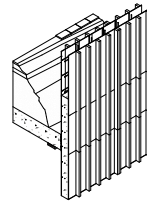
*The excavated base*  
exposed rebar, supporting the existing



*The Altered base*  
folding the rebar



*Formwork interior*  
finishing off the formwork, adding the railing negative



*Poring the pigment mix*  
red/green/gray/pink/white

*Pigment ratios*  
based on 15 gr cement (grey)

*Red*

ultra red (2gr)  
permanent red (1gr)  
Oxygen red (2gr)

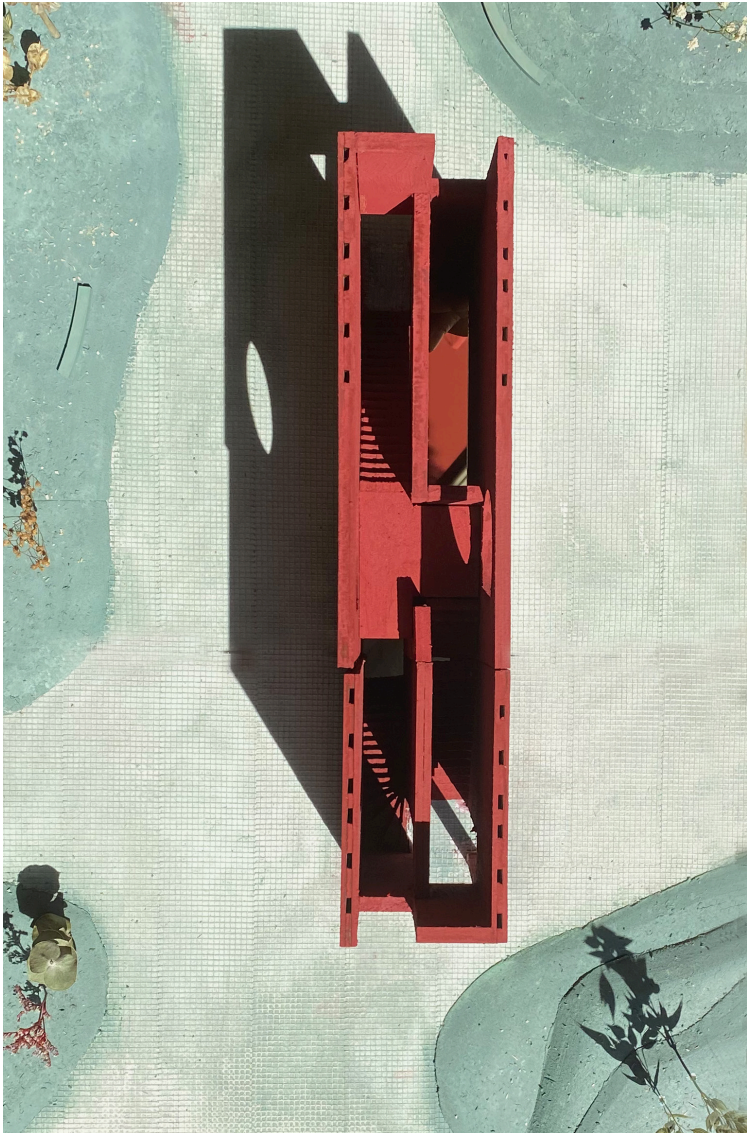
*Green*

bosch green (2gr)  
malachiet (2gr)  
black (0.2gr)

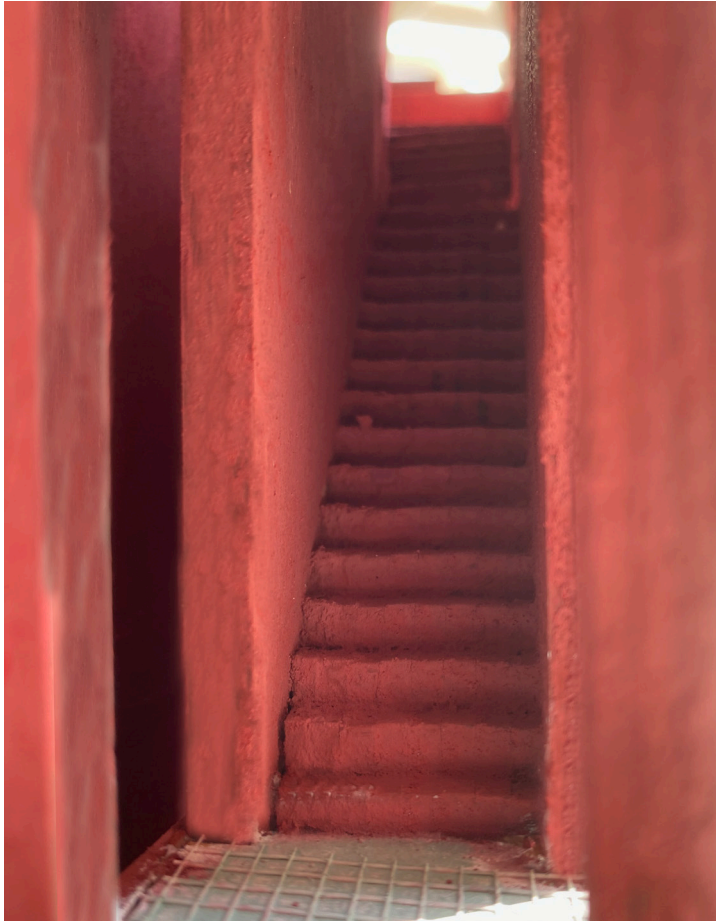
*White*

white cement (15gr)

THE EXPERIENCE OF THE ELEMENTS a small tour through the building by the hand of images of the model, to feel the form and the atmosphere. The punctuation is divided in two buildings which are connected by their form and appearance.

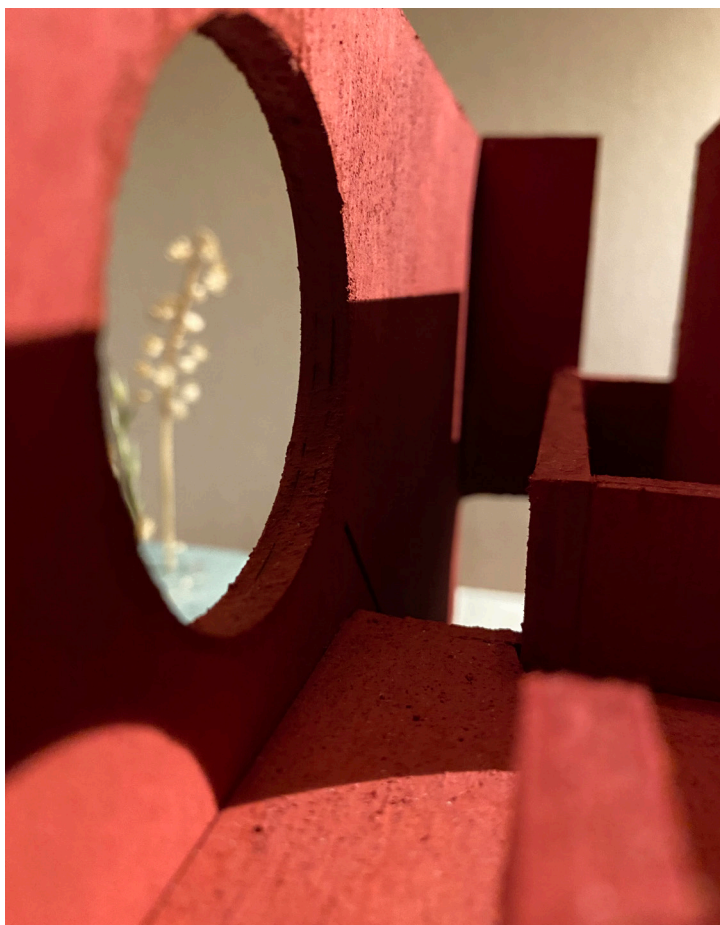


*The Urban Settlement*



*The Entrance*

Approaching the opening, triggered by the stairs in front  
and on the side. A moment to discover



*A moment of wonder*

Open-up the relation and the change of perspective,  
find and realise, feel the wind and smell the city





*The Vertical Relation*

An open floor allowing lights to the underground, the unexpected relation and underlying space (exhibition), the potential of the unground





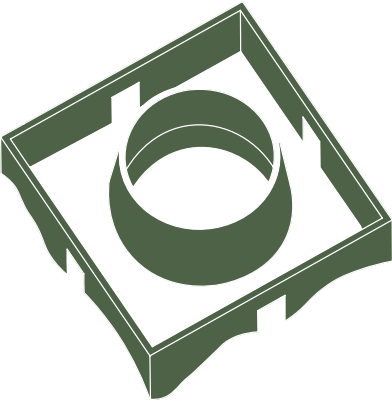
*The unexpected meeting*

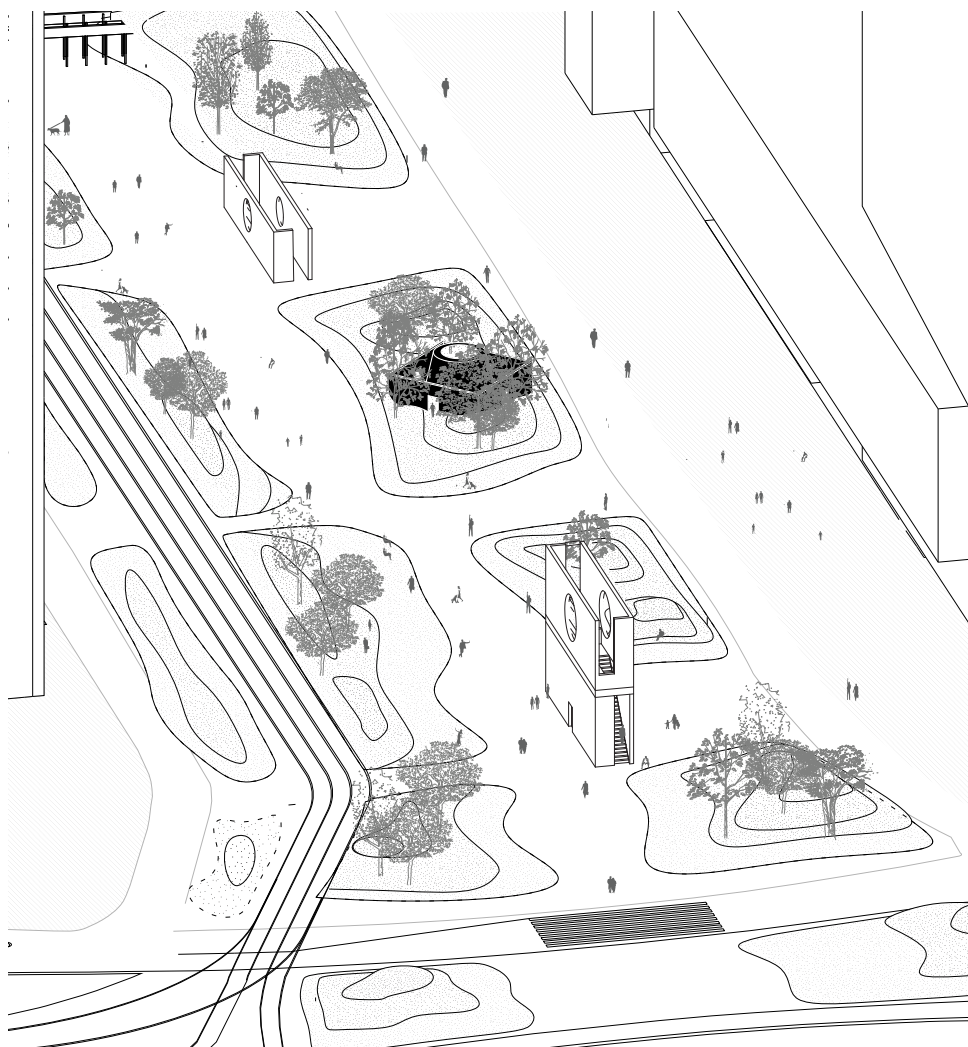
Being in fast movement, a moment of interaction or rest  
with another body, with the wall and it's ambience





THE INCLUSION almost the last one of the serie but maybe the most important one. This intervention gives the possibility in our world of rush for a moment of discover, reveal and rest. By its hidden charachter, and openings. To enter, the body got challenged by it forms, to seperate and to take a break from the ordinary. Besides the form, the openings of the light will give an extra sparkle to the experience. The feeling of being surrounded by different smells and scenery of lights and maybe a small breeze gives this moment of relief.





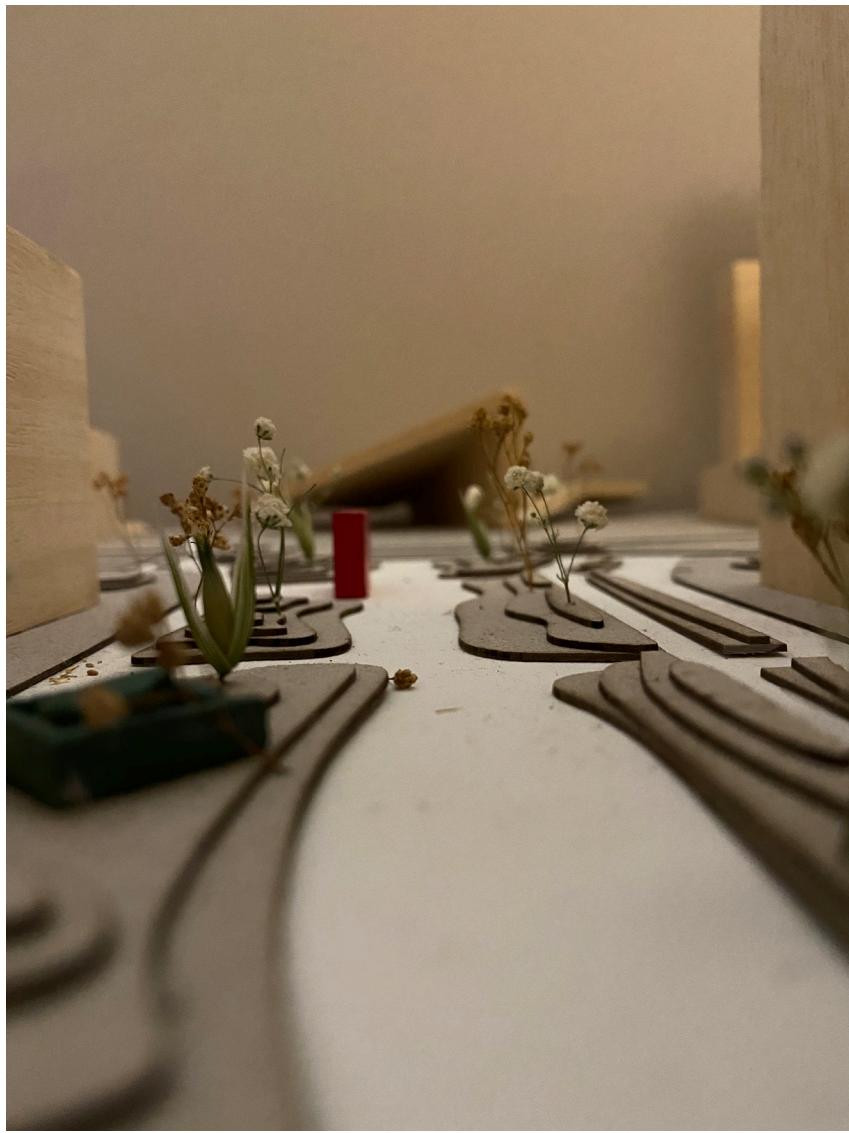








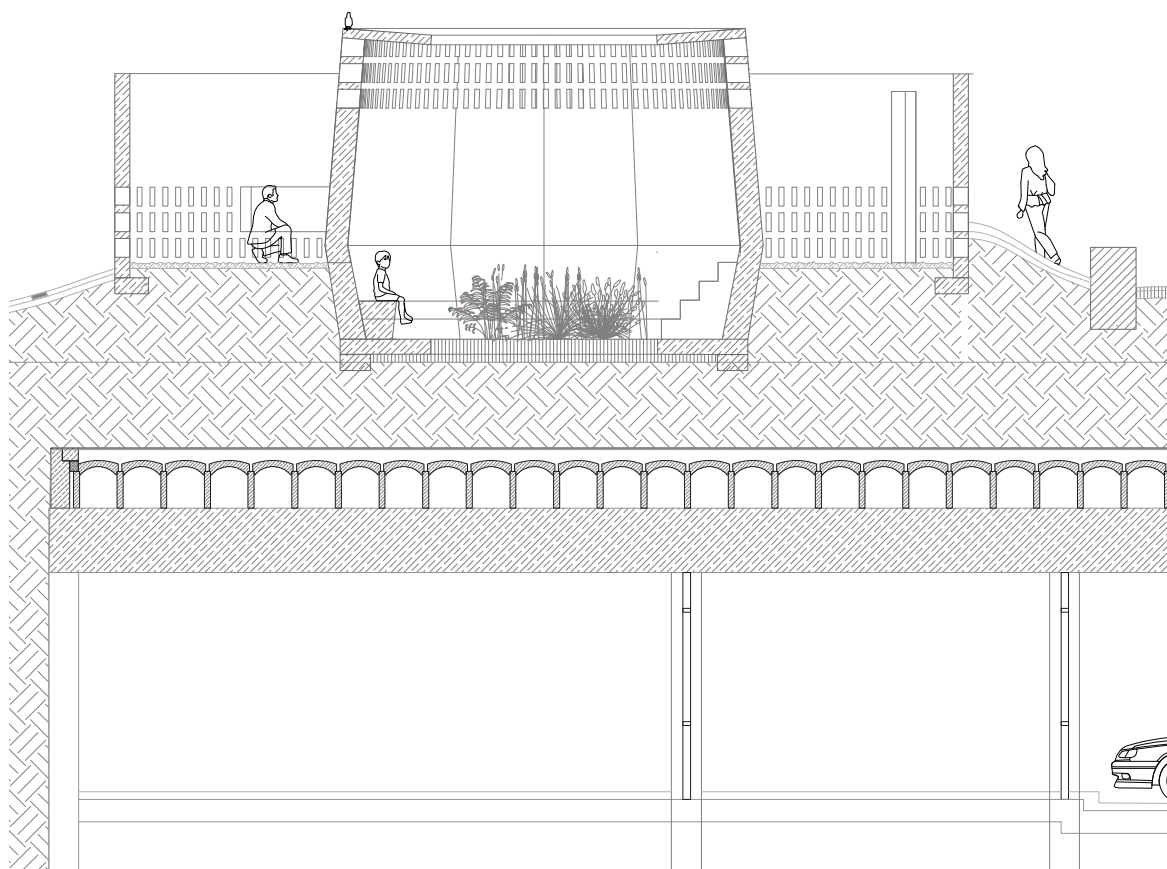




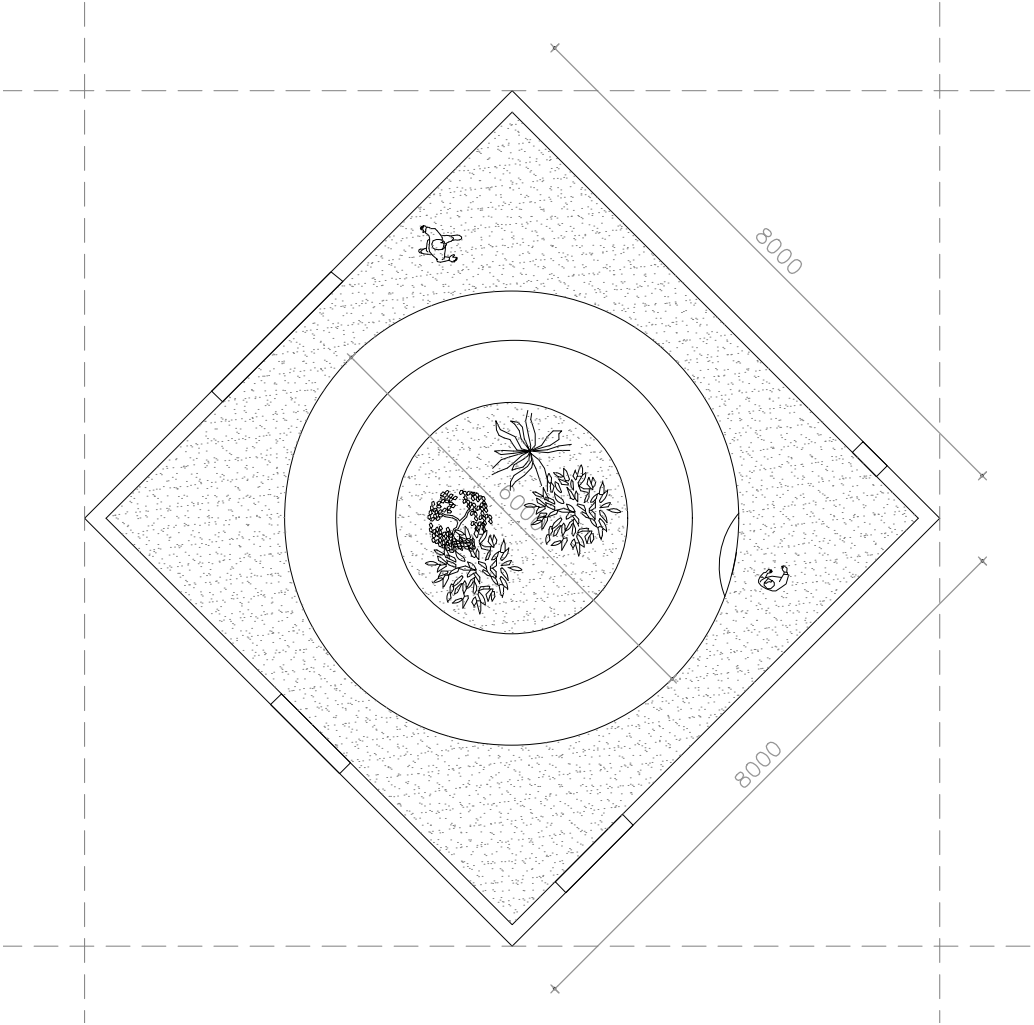


Image urban  
*1:50*

**HIDDEN CHARACTER** the inclusion is hidden in the introduced landscape and with it's curvy edges, the green slowly and smoothly will take over the face. Besides the human, as well the animal get a place, the open character of the facade affords light but as well potential for the birds to lay a nest or for the hedgehog to settle



THE INCLUSION consists of 4 moment which offer the body to interact physically with the building and thereby relate to the forms and start a new relation. These difference moments of interaction took different shapes, to strengthen the experience.



Floorplan  
1:100



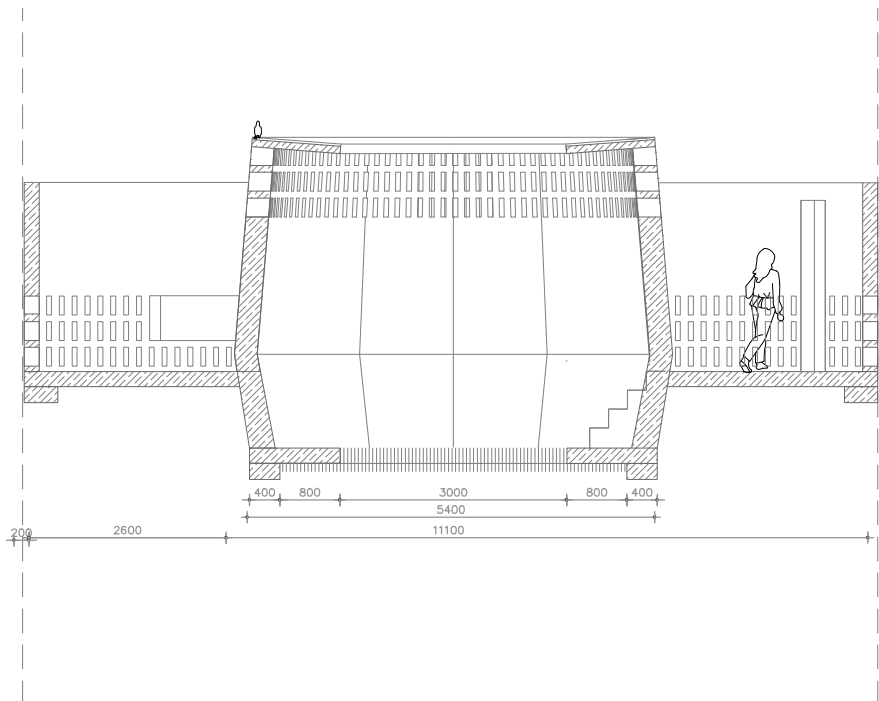


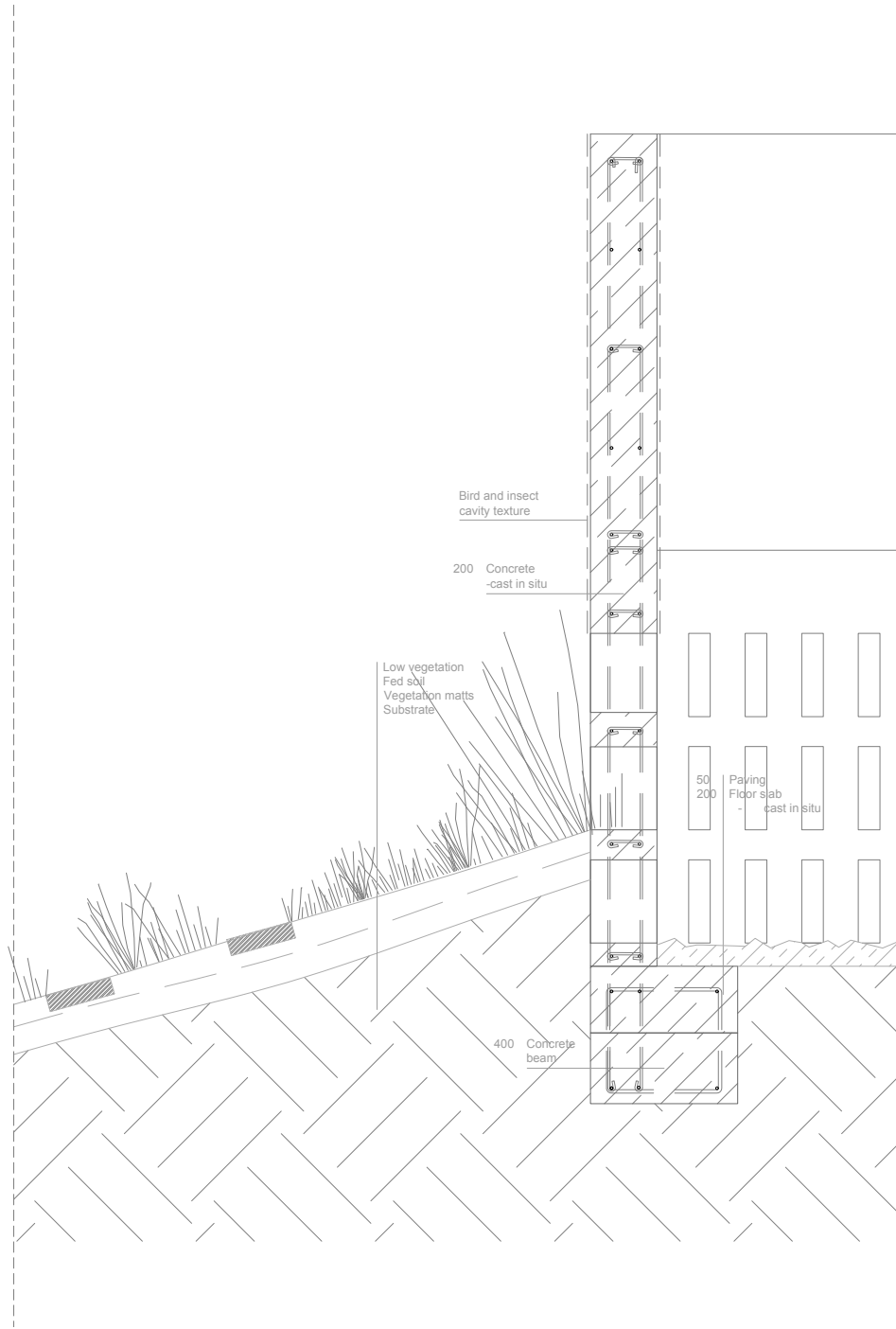
Image floor-plan (scale model)  
*1:50*

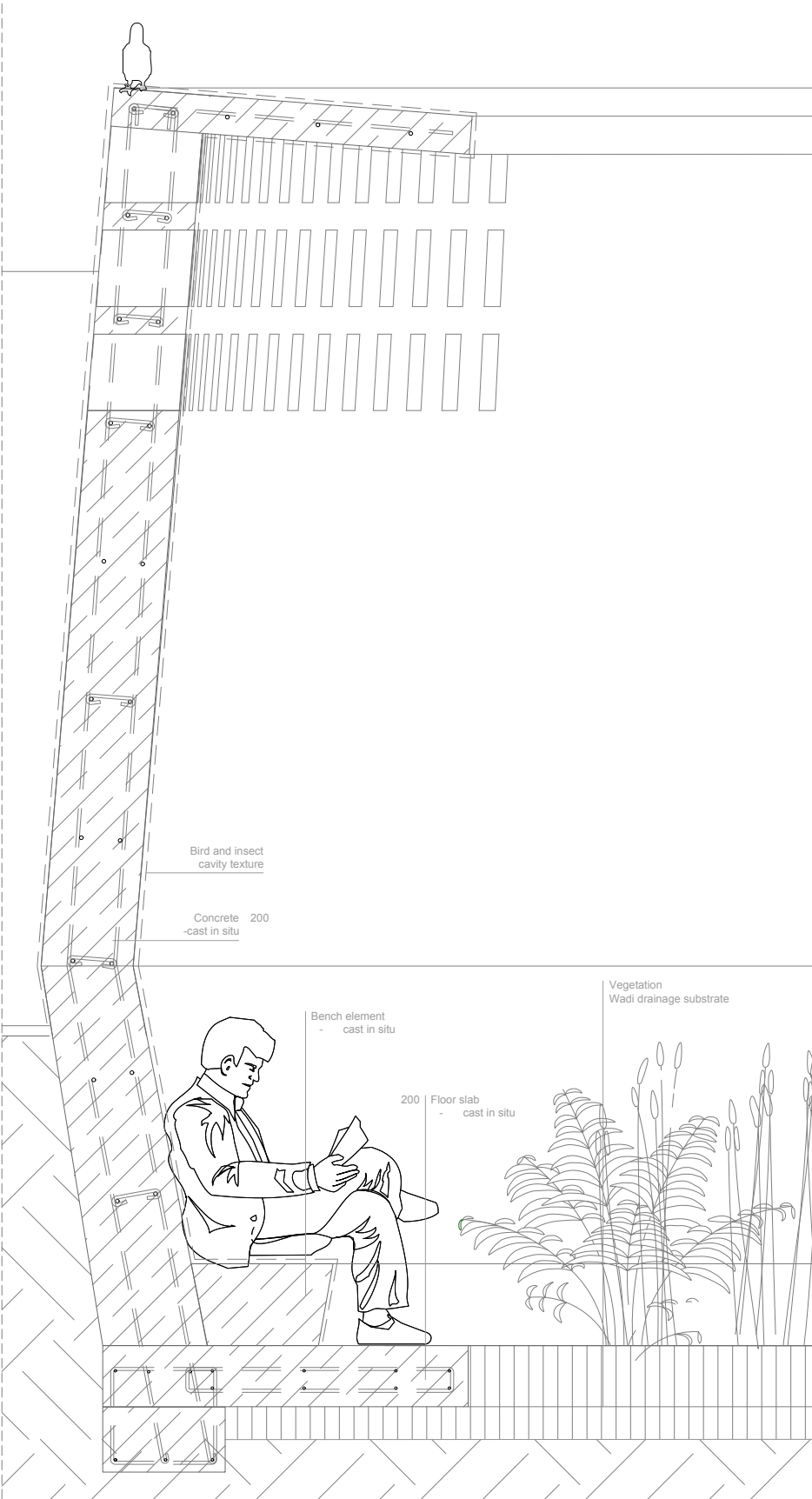


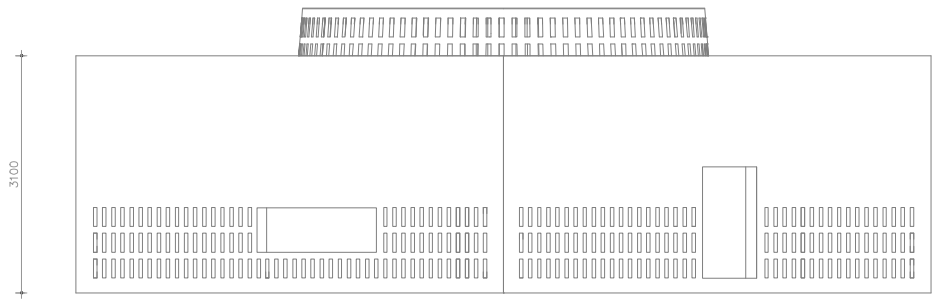
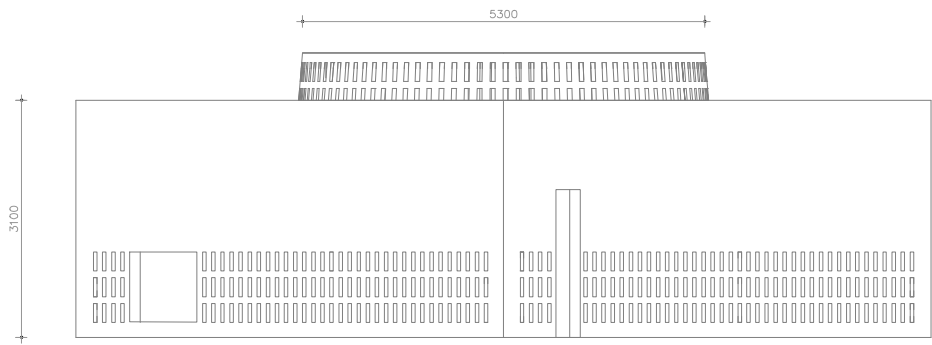


THE INNER PLACE trough a small experience the body will find a small entrance, below the hips to again feel the material, interact en find the inner place. A place of rest, enhanced by the incidence of light and the green core. including differences of flowers, which will trigger the other senses.



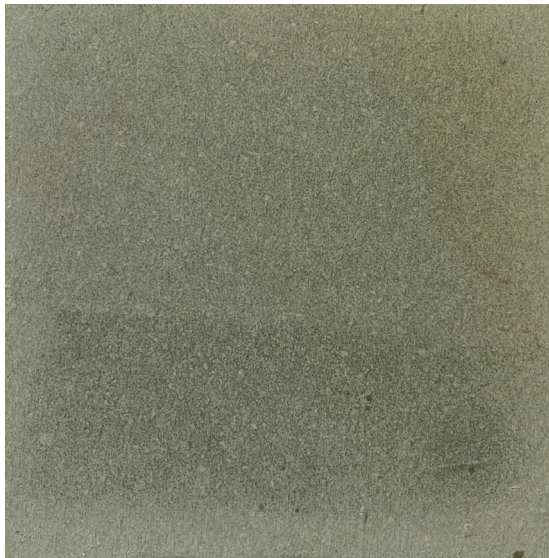




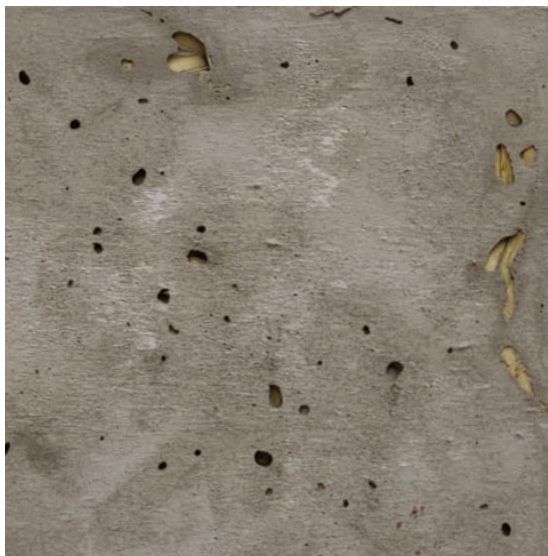




Material sample  
*1:10*







Material sample  
*1:10*

THE EXPERIENCE OF THE ELEMENTS a small tour  
through the building by the hand of images of the model, to  
feel the form and the atmosphere. The punctuation, hidden in  
the landscape, will trigger with its forms, shadows and places  
of interaction







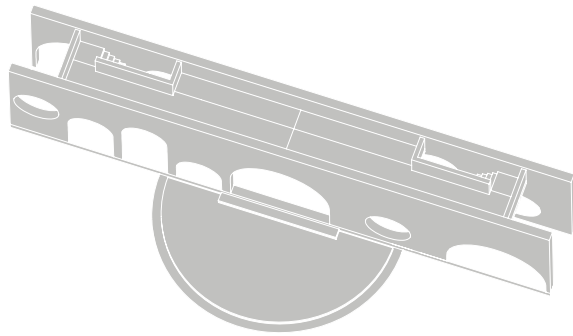


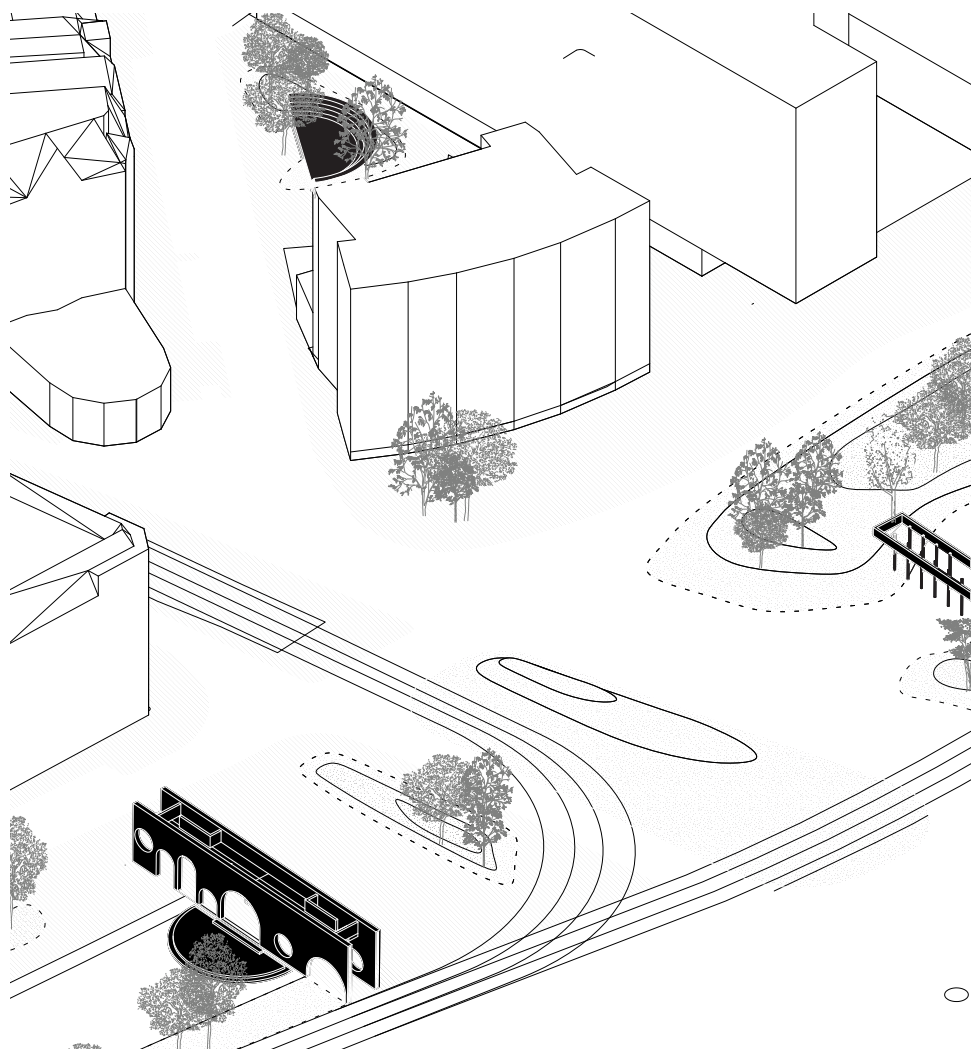






THE REVEAL the last punctuation, which will ensure the integration of the area and bring back together the different districts. It's rough and long appearance will close off and connect the area with the city (existence) to reintroduce the water and the green character of the hidden green layer of the city. As well it will reconnect the "singel" with the central area. But moreover, for the local residents, the passer-by, the tourist and so on. A place to gather, sit, relax and view the city and the green areas from a higher level. It brings back the human scale in the city center. Because of its big square in front, it could also fulfill lots of other functions. The different openings, triggers the user to look from the different heights, perspectives and so motivate and perceive differently

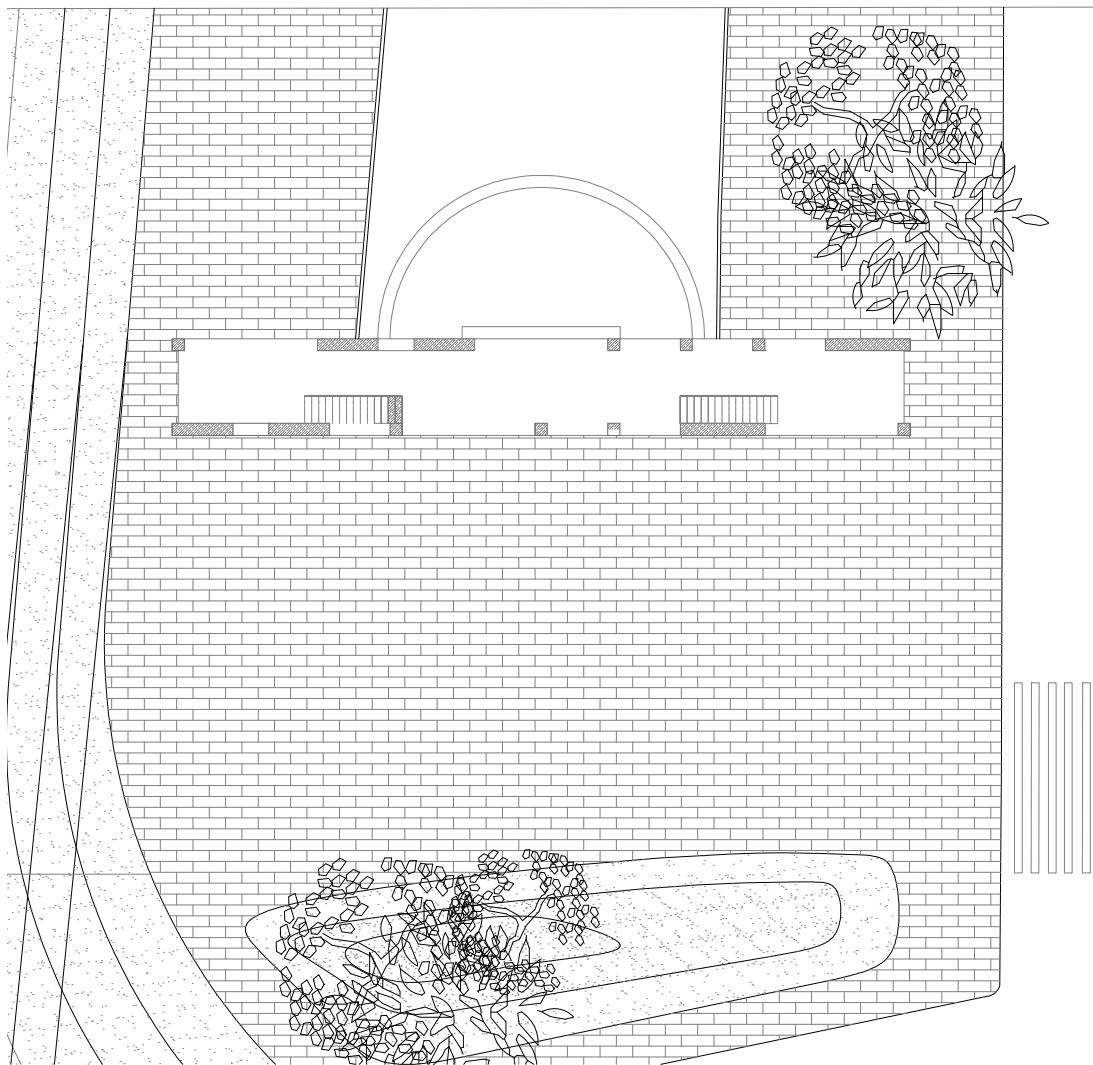








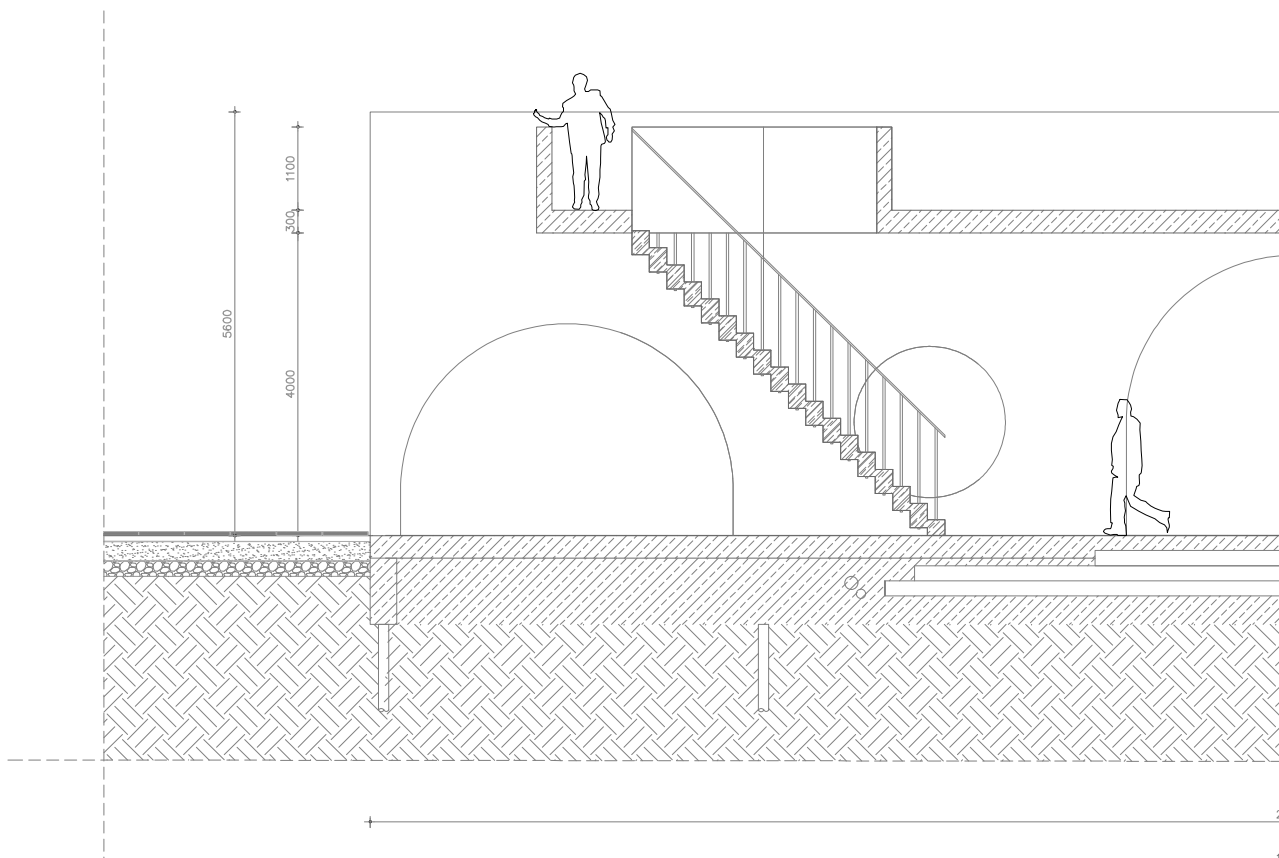




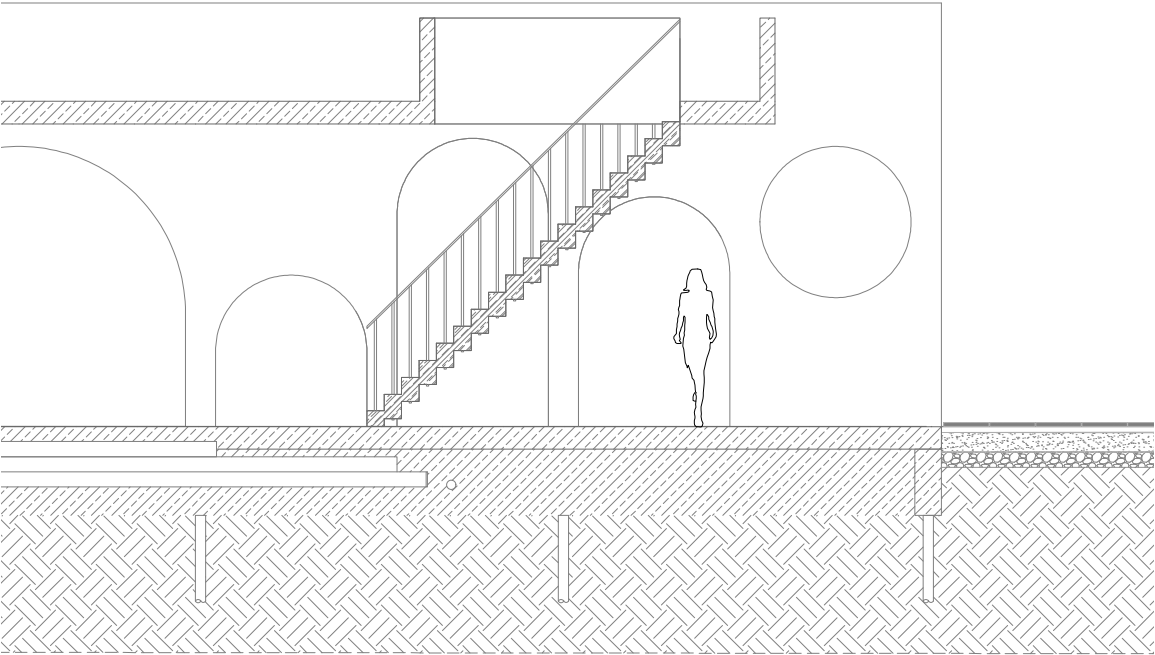


THE REVEAL has a long character and interrupts the pedestrian flow with its arches to arise curiosity. The square facing the central station is currently undefined, this punctuation will invite for different use. The same idea applies to the water side, which is reintroduced by it's form. The wall as element, suggest something new, in combination with the arches it will introduce and let the body wonder.





Longitudinal Section  
1:100



24400 +

11000



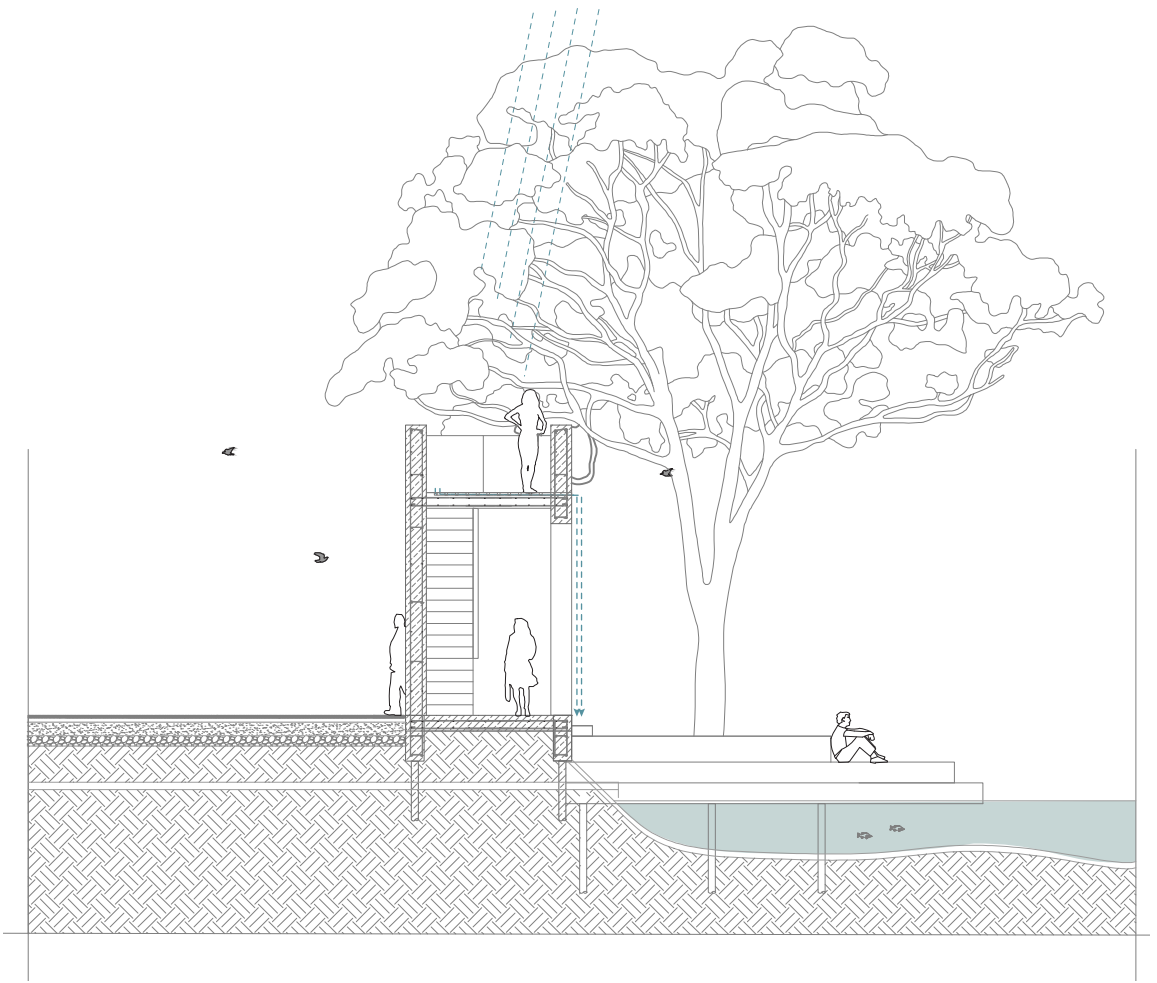




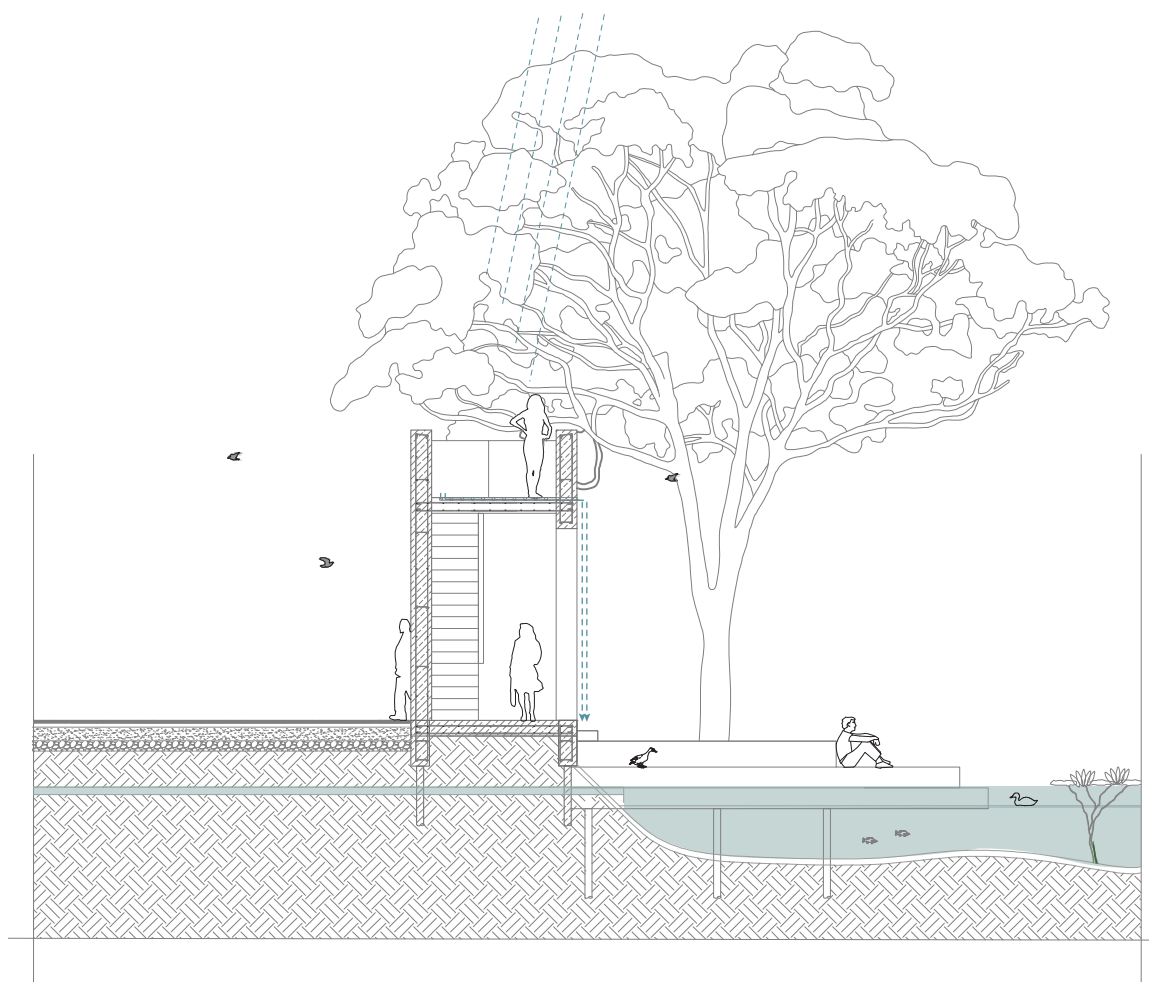








Water Drainage (against flooding)  
1:100

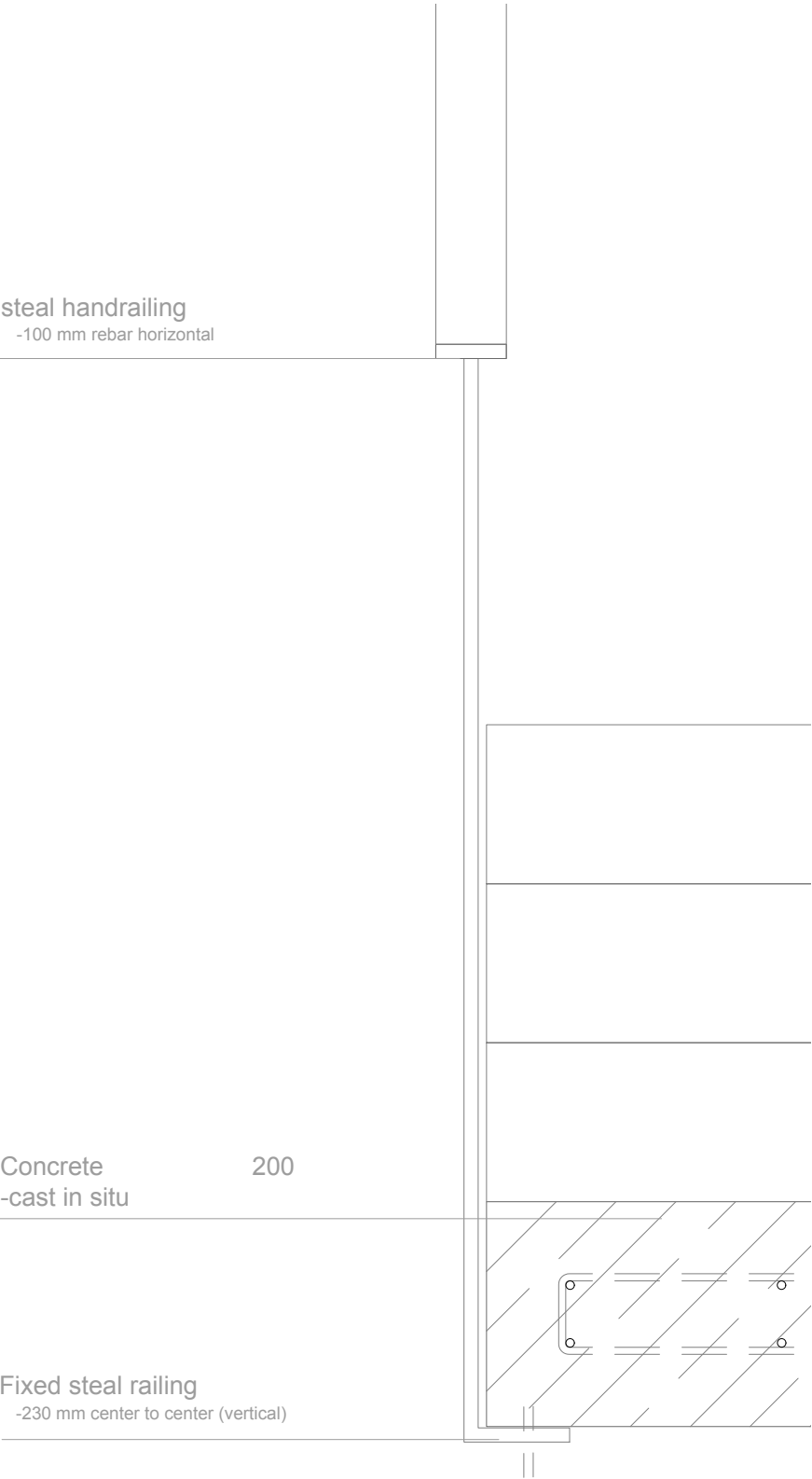


Water Drainage (after heavy rainstorms)  
*1:100*

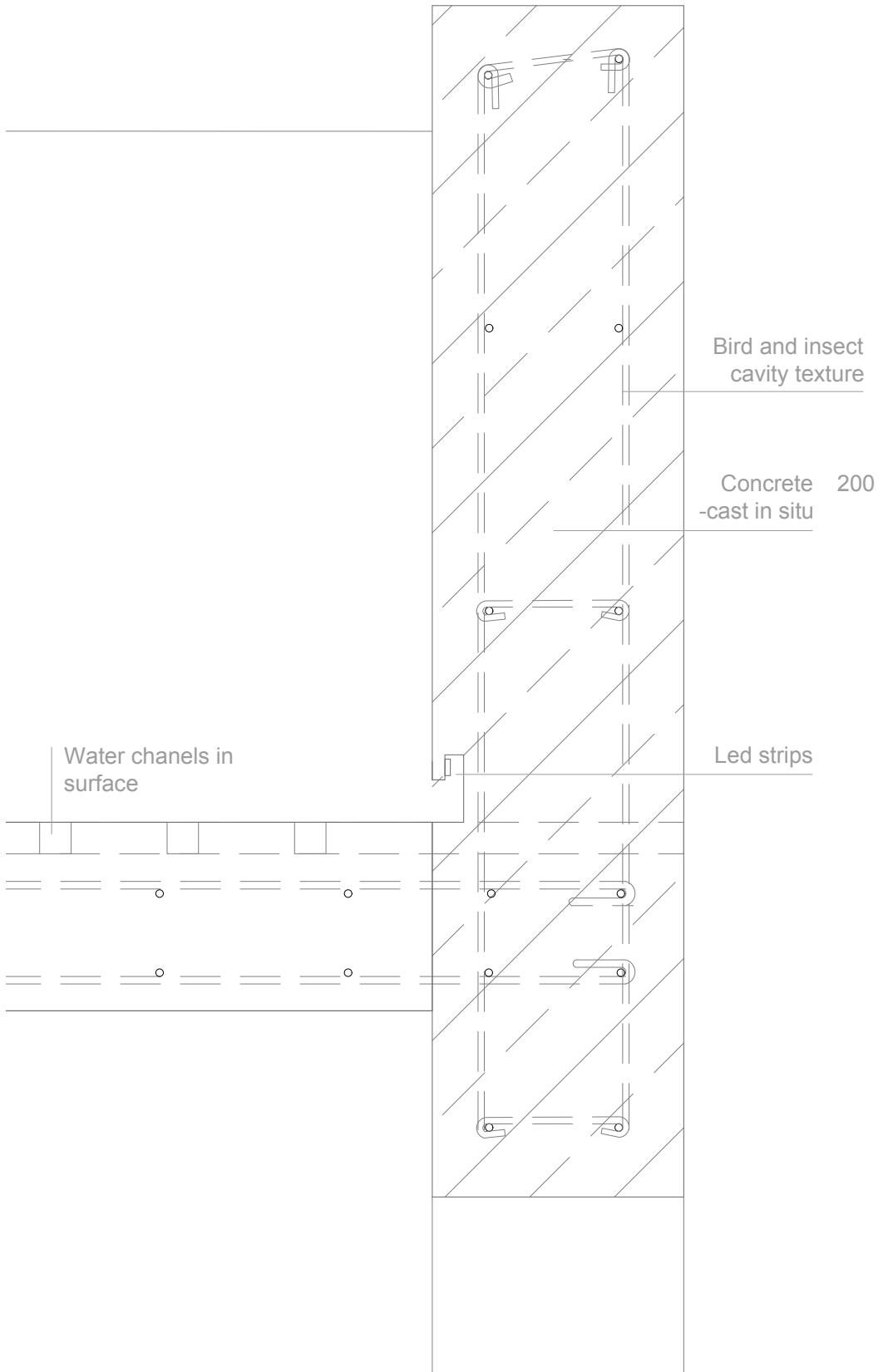












THE EXPERIENCE OF THE ELEMENTS a small tour through the building by the hand of images of the model, to feel the form and the atmosphere. The punctuation, with its dual meaning; a wall to separate and connect and a corridor the wonder and discover the beauty of the city.





